



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**

June 2026

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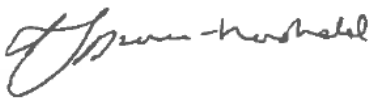
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Local Responsibilities and Commitment

This ASR was prepared by the Environmental Health, Public Protection Department of Kirklees Council with the support and agreement of the following officers and departments:

- Energy and Climate Change team
- Electric Vehicle Infrastructure team
- Public Health
- Transport Strategy
- Highways
- Environmental Health (Pollution and Noise Control Team)
- Planning
- Major Projects

This ASR has been approved by Rachel Spencer-Henshall, Deputy Chief Executive and Executive Director for Public Health and Corporate Resources



This ASR has been signed off by Rachel Spencer-Henshall, Deputy Chief Executive and Executive Director for Public Health and Corporate Resources.

If you have any comments on this ASR, please send them to Natalie Heaney at:

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Executive Summary: Air Quality in our area

Air Quality in Kirklees

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})	<p>Particulate matter is everything in the air that is not a gas.</p> <p>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.</p> <p>PM₁₀ refers to particles under 10 micrometres. Fine particulate matter or PM_{2.5} are particles under 2.5 micrometres.</p>

Air quality within the district is predominantly influenced by emissions from road transport. The strategic and local road network connects communities across Kirklees and includes key corridors linking the West Yorkshire conurbation with Greater Manchester via the M62. As a result, emissions from road traffic, including both local and through traffic, represent the principal source of elevated pollutant concentrations at roadside locations where there is relevant exposure. Emissions from industrial and domestic sources also contribute to background concentrations and are regulated where appropriate.

Air pollution remains a significant public health issue. In Kirklees, an estimated 5.3% of mortality is attributable to particulate air pollution¹, with the greatest impacts on vulnerable

¹ Office for Health Improvement and Disparities. (2026). *Public health profiles*. Retrieved June 18th, 2026, from <https://fingertips.phe.org.uk/>

groups including children, older people and those with existing cardiovascular and respiratory conditions.

The principal pollutants of concern are nitrogen dioxide (NO₂) and particulate matter (PM₁₀ and PM_{2.5}). Seven Air Quality Management Areas (AQMA) remain designated in relation to NO₂ exceedances within Kirklees where exceedances of the air quality objectives were previously identified or considered likely. Monitoring data indicates a general downward trend in NO₂ concentrations in recent years, although this is not consistent across all locations and elevated concentrations persist at some roadside sites. In 2025, exceedances of the annual mean NO₂ objective were identified within AQMA 9 (Huddersfield Town Centre), while other AQMA show compliance or concentrations close to the objective.

This improvement has enabled a review of existing AQMA, resulting in the revocation and amendment of several areas where sustained compliance has been demonstrated. Monitoring evidence indicates that concentrations within AQMA 8 (Outlane) have remained below the annual mean objective, and within 10% of the objective, for a sustained period. The Council therefore intends to progress its revocation, subject to consultation with Defra and the LAQM Helpdesk.

Throughout 2025, we have also continued to refine and expand the diffusion tube monitoring network to improve spatial coverage, better identify areas of exceedance, and strengthen the evidence base for targeted action.

Actions to improve Air Quality

Whilst air quality has improved significantly in recent decades, there remain areas within Kirklees where further action is required to reduce emissions and protect public health.

Kirklees Council continues to deliver improvements through a combination of local measures and wider policy initiatives, with the Air Quality Action Plan (AQAP) as the primary mechanism for achieving and maintaining air quality objectives. The previous AQAP (2019-2024) is being updated, and a draft AQAP (2026-2031) was submitted to Defra in May 2026.

Measures that will lead to improved air quality are discussed in the report, and are being implemented across key areas including transport, planning, environmental health, and public health. These include actions to reduce emissions from road traffic, support low-emission transport, manage industrial and domestic emissions, and improve understanding of particulate pollution.

These measures are delivered in partnership with regional organisations, including the West Yorkshire Combined Authority (WYCA) and neighbouring Local Authorities and are supported by, and aligned with, wider Council and regional policies, including the Kirklees Transport Strategy, the West Yorkshire Local Transport Plan, the emerging Local Plan and the Council's Climate Change Action Plan, recognising the co-benefits between air quality improvement and carbon reduction. They are also consistent with national policy, including the Environmental Improvement Plan and the Air Quality Strategy, which set out the framework for improving air quality and reducing emissions, including fine particulate matter (PM_{2.5}, particulate matter with a diameter of less than 2.5 micrometres).

Conclusions and priorities

Analysis of 2025 air quality monitoring data shows that the annual mean NO₂ objective is exceeded at a small number of locations within AQMA 9 (Huddersfield Town Centre). No exceedances were identified outside existing AQMAs, confirming that current AQMA designations remain appropriate.

Real-time monitoring undertaken in 2025 at the Dewsbury Ashworth Grange automatic monitoring station demonstrates compliance with the NO₂, PM₁₀ and PM_{2.5} air quality objectives, with concentrations well below the relevant objectives and no exceedances of short-term objectives.

Air quality continues to improve overall, with a general downward trend in NO₂ across the district. This has enabled significant progress in AQMA review. AQMAs 1, 2 and 4 were revoked, and AQMAs 3, 7 and 10 were amended in November 2025. In addition, AQMA 8 is being considered for revocation, subject to consultation, due to sustained compliance. Monitoring will continue across the district to support ongoing review.

However, there remains a risk of exceedance within some remaining AQMAs, indicating that further measures are required. These areas are either close to the legal objectives, have exceeded in recent years, or require additional monitoring to confirm whether revocation is appropriate.

The Air Quality Action Plan (AQAP) 2026-2031 has been updated and submitted to Defra, building on the previous AQAP and reflecting current monitoring data, AQMA changes and emerging priorities. The updated AQAP focuses on areas where exceedances persist or where there is a risk of exceedance, which are discussed in detailed within this report.

Kirklees Council has continued to deliver a range of measures during 2025 to improve local air quality.

Our priorities for the coming year are to:

1. Complete the update and implementation of the AQAP (2026-2031);
2. Progress further review of AQMAs, including the potential revocation of AQMA 8 (Outlane), subject to statutory consultation;
3. Continue to refine and expand the monitoring network, including participation in regional PM_{2.5} monitoring initiatives;
4. Support delivery of measures to reduce emissions from transport, including low emission vehicles and infrastructure
5. Ensure air quality is integrated within transport, planning and climate change strategies, working with partners including the West Yorkshire Combined Authority (WYCA).

How to get involved

If you require further information on local air quality, please use the following websites:

[Air quality | Kirklees Council](#)

[UK Air, Defra's air quality information service](#)
[West Yorkshire Combined Authority Dashboard](#)

or contact the Council on air.quality@kirklees.gov.uk

1. Local Air Quality Management

This report provides an overview of air quality in Kirklees 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 Kirklees 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 (AQMAs) 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 and maintained, and provide dates by which measures will be carried out.

A summary of AQMAs declared by Kirklees Council can be found in **Error! Reference source not found.**. The table presents a description of the seven AQMAs that are currently designated within the Borough. Appendix D: Map(s) of monitoring locations and AQMAs provides maps of AQMAs and also the air quality monitoring locations in relation to the AQMAs. The air quality objectives pertinent to the current AQMA designation(s) are as follows:

- NO₂ annual mean of 40 µg/m³ (AQMAs 3, 5 - 10)

In this year's ASR, we propose to revoke AQMA 8, Outlane (see Chapter 3) and are at the consultation stage with Defra and the LAQM Helpdesk. Within Chapter 3, we set out of reasoning for:

- The revocation of AQMA 8 and;
- Explain our decisions not to revoke our other AQMAs, even where there is compliance in 2025.

In our 2025 ASR (Chapter 3), it was reported that the Council was progressing the revocation of three AQMAs (AQMA 1, AQMA 2 and AQMA 4), alongside amendments to the boundaries of three further AQMAs (AQMA 3, AQMA 7 and AQMA 10). The air quality objectives pertinent to these AQMA designations are as follows:

- NO₂ annual mean of 40 µg/m³ (AQMA 1, and AQMAs 3 - 10)
- PM₁₀ 24-hour mean of 50 µg/m³ not to be exceeded more than 35 times a year (AQMA 2),

Following continued compliance with the relevant air quality objectives, these revocations and boundary amendments were formally enacted on 11th November 2025.

Monitoring within the revoked AQMA 1 (Bradley) has continued, with all active monitoring locations recording concentrations below the annual mean objective (e.g. tube 6: 35.5 µg/m³; tube 22: 29.4 µg/m³; tube 25: 21.3 µg/m³), and lower than those reported in 2024. A number of historic monitoring locations within the AQMA are no longer in operation. These results confirm continued compliance with the annual mean NO₂ objective, with concentrations remaining below 36 µg/m³.

Monitoring within the revoked AQMA 2 (Scouthill) has continued, with all active monitoring locations recording concentrations below the annual mean NO₂ objective (e.g. tube 5: 30.0 µg/m³; tube 30: 32.9 µg/m³; tube 157: 32.2 µg/m³), and lower than those reported in previous years. A number of historic monitoring locations within the AQMA (including tubes 19 and 70) are no longer in operation. These results confirm continued compliance with the annual mean NO₂ objective, with concentrations more than 10% below the

objective (i.e. below 36 $\mu\text{g}/\text{m}^3$) and demonstrate a reduction compared to those reported in 2024.

Monitoring within revoked AQMA 4 (Birkenshaw) has ceased following revocation. Prior to cessation, all monitoring locations recorded concentrations well below the annual mean NO_2 objective (as reported in the 2025 ASR). The monitoring network has since been rationalised to prioritise areas of potential concern.

Monitoring within the revoked section of AQMA 3 (Ainley Top) at Lindley Moor Road, did not continue in 2025. This was due to previously sustained compliance with the annual mean NO_2 objective, with concentrations consistently at least 10% below the objective (i.e. below 36 $\mu\text{g}/\text{m}^3$).

However, monitoring has continued within the revoked sections of AQMA 7 (Liversedge), including at Frost Hill and the Halifax Road/Leeds Road junction, and AQMA 10 (Thornton Lodge), adjacent to the A62 Manchester Road north-east of the signalised junction with Longroyd Lane. These are discussed in Section 3.2.1 for each AQMA.

Table 2.1 Declared Air Quality Management Areas

Table 2.1 Details of Air Quality Management Areas declared

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 3 Ainley Top	Declared 01/11/2017 Amended 11/11/2025	NO ₂ Annual Mean	The designated area incorporates Halifax Road (A629) and Yew Tree Road, which is in close proximity to the Ainley Top Roundabout at Birchcliffe	YES	44 µg/m ³	33.9 µg/m ³	Five Years	Air Quality Action Plan for Kirklees Council Version 1.4 Published; Sept 2019. Our Draft Air Quality Action Plan (2026 – 2031) for Kirklees Council has been submitted to Defra in May 2026	Air quality Kirklees Council
AQMA 5 Eastborough	Declared 01/11/2017	NO ₂ Annual Mean	The designated area incorporates Leeds Road (A653), Dewsbury Ring Road (A638), Wakefield Road (A638), Highgate	NO	60 µg/m ³	39.3 µg/m ³	One year	Air Quality Action Plan for Kirklees Council Version 1.4 Published; Sept 2019. Our Draft Air Quality Action Plan (2026 – 2031) for Kirklees Council has been submitted to	Air quality Kirklees Council

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
			Road, Highgate Terrace, Bank Street and Old Bank Road, which is in close proximity to Dewsbury Town Centre					Defra in May 2026	
AQMA 6 Edgerton	Declared 01/11/2017	NO ₂ Annual Mean	The designated area incorporates Edgerton Road (A629) and Blacker Road, which is in close proximity to Huddersfield Town Centre	NO	54 µg/m ³	32.5 µg/m ³	Three years	Air Quality Action Plan for Kirklees Council Version 1.4 Published; Sept 2019. Our Draft Air Quality Action Plan (2026 – 2031) for Kirklees Council has been submitted to Defra in May 2026	Air quality Kirklees Council
AQMA 7 Liversedge	Declared 01/11/2017 Amended 11/11/2025	NO ₂ Annual Mean	The designated area incorporates Wakefield Road (A638), Wormald	NO	45 µg/m ³	35.0 µg/m ³	Three years (One year compliant below 10%)	Air Quality Action Plan for Kirklees Council Version 1.4 Published; Sept 2019. Our Draft Air Quality	Air quality Kirklees Council

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
			Street and Well Street, which is in Liversedge				of the AQO)	Action Plan (2026 – 2031) for Kirklees Council has been submitted to Defra in May 2026	
AQMA 8 Outlane	Declared 01/11/2017	NO ₂ Annual Mean	The designated area incorporates New Hey Road and Round Ings Road, which is in close proximity to the M62 at Outlane	YES	54 µg/m ³	27.8 µg/m ³	Six years	Air Quality Action Plan for Kirklees Council Version 1.4 Published; Sept 2019. Our Draft Air Quality Action Plan (2026 – 2031) for Kirklees Council has been submitted to Defra in May 2026	Air quality Kirklees Council
AQMA 9 Huddersfield Town Centre	Declared 01/11/2017	NO ₂ Annual Mean	The designated area incorporates roads bordering and within the	NO	55 µg/m ³	44.9 µg/m ³	Not compliant	Air Quality Action Plan for Kirklees Council Version 1.4 Published; Sept 2019. Our Draft Air Quality Action Plan (2026 – 2031) for	Air quality Kirklees Council

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
			Huddersfield Ring Road					Kirklees Council has been submitted to Defra in May 2026	
AQMA 10 Thornton Lodge	Declared 15/06/2019 Amended 11/11/2025	NO ₂ Annual Mean	The designated area incorporates Manchester Road, Birkhouse Lane and Thornton Lodge Road, which is in close proximity to Huddersfield Town Centre	NO	47 µg/m ³	38.2 µg/m ³	One year	Air Quality Action Plan for Kirklees Council Version 1.4 Published; Sept 2019. Our Draft Air Quality Action Plan (2026 – 2031) for Kirklees Council has been submitted to Defra in May 2026	Air quality Kirklees Council

- ☒ Kirklees Council confirm the information on UK-Air regarding their AQMA(s) is up to date.
- ☒ Kirklees Council confirm that all current AQAPs have been submitted to Defra.

2.2 Progress and Impact of Measures to Address Air Quality in Kirklees

Defra's appraisal of last year's ASR concluded the following, where the actions taken are displayed in each bullet point following:

- “KMC have outlined a consultation to revoke AQMA 3,7 and 10 and amend AQMA 1,2 and 4. An update on this should be provided in the next submission.
 - The appraisal comment incorrectly referred to the AQMAs proposed for revocation and amendment. Following consultation in May 2025, Kirklees Council proceeded with the amendment of AQMAs 3, 7 and 10 and revocation of AQMAs 1,2 and 4. The relevant Orders were formalised in November 2025.
- “The last published AQAP was in 2019 and this should be updated”
 - Kirklees Council acknowledges that the current adopted AQAP was published in 2019 and requires updating to reflect the latest monitoring data, compliance status, and the evolving local and national policy context.
 - The Council has secured an agreed extension with Defra for the submission of a revised AQAP (agreed in November 2025), with a final submission deadline of 31st May 2026. The draft was subject to public consultation in March 2026 and stakeholder consultation May 2026.
 - The draft updated AQAP was prepared and submitted to Defra on 29th May 2026 in accordance with the agreed extension date.
 - The development of the updated AQAP has been underpinned by a robust evidence base, including baseline modelling and source apportionment, alongside detailed dispersion modelling for AQMA 9 (Huddersfield Town Centre). This work has enabled the identification of key emission sources and the selection of targeted and proportionate measures.
 - We are in the process of considering consultation responses and await appraisal by Defra. We will finalise the AQAP for submission to Defra in line with the agreed extension.
- “Monitoring sites have been identified on maps that are clear to understand.”
 - The clear presentation of monitoring site locations on maps has been maintained within this report (Appendix D), ensuring continued alignment with Defra LAQM reporting expectations.
- “KMC have provided details on the diffusion tubes used and the corresponding QA/QC procedures. Justification for the use of a national bias factor has been provided.”
 - Diffusion tube methods and QA/QC procedures are reported, and the use of a national bias factor remains justified in line with TG22.
- “KMC have produced a detailed analysis showing the change in pollutant concentrations between 2020-2024, including for individual AQMAs with appropriate graphs. This is commended and should continue in future submissions.”
 - Trend analysis of pollutant concentrations, including AQMA-specific graphs, has been maintained in this year's report (2021 – 2025)
- “A significant number of air quality measures have outlined identified by KMC, including its' top 3 air quality measures. This is very welcomed.”
 - A wide range of air quality measures, including our top 3 priority actions, are identified and reported as part of this year's submission. These are covered in the respective sections of this year's annual status report.

- “KMC have provided details on the Smoke Control Order present in its’ jurisdiction.
 - Kirklees remains within subject to a Smoke Control Order. Information on Smoke Control Areas has been retained and is presented in this year’s ASR.
- “Good discussion is provided related to new developments and potential sources of air pollution.”
 - This approach has been retained in this year’s ASR, with a continued assessment of new developments and emerging sources to ensure air quality impacts are appropriately considered.
- “KMC have provided a detailed discussion on PM_{2.5} initiatives within KMC, including reference to the Public Health Outcomes Framework and % mortality.”
 - A detailed discussion on PM_{2.5} has been retained and further strengthened in this year’s ASR in Section 2.3. Section 2.3 provides an updated overview of PM_{2.5} concentrations, sources, and local and regional initiatives, including ongoing work with the West Yorkshire Combined Authority to improve the evidence base and monitoring of particulate matter across the district. The Council continues to recognise PM_{2.5} as a key public health priority, with actions aligned to both air quality and climate change strategies.
- “KMC acknowledged that some diffusion tubes were overexposed during the reporting year. They should aim to minimise this data loss in the next reporting year”
 - This point is acknowledged. Measures have been implemented to improve deployment scheduling and site management, resulting in improved overall annual data capture across the network. The Council will continue to refine procedures, particularly at locations where access or operational constraints exist, to further minimise data loss. Weather-related constraints resulted in one instance of overexposure; further details are provided in Appendix C.

Kirklees 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 – Progress on Measures to Improve Air Quality

Table 2. A total of 41 measures are presented within Table 2.2 – Progress on Measures to Improve Air Quality

Table 2, with the type of measure and the progress we 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 – Progress on Measures to Improve Air Quality

Table 2.

Details on these measures can be found in the [AQAP](#) and in our forthcoming revised Air Quality Action Plan (2026-2031) currently under review by Defra.

We expect the following measures to be completed over the course of the next reporting year:

- **West Yorkshire Bus Alliance voluntary agreement for Euro VI or equivalent buses by 2026 (Measure 12):**
 Bus operators across West Yorkshire are expected to complete delivery of the voluntary commitment for buses operating within the district to achieve Euro VI emission standards or equivalent. This measure is intended to reduce emissions of

nitrogen oxides (NO_x) and particulate matter from the local bus fleet and contribute toward improved roadside air quality, particularly within AQMAs.

- **AQ assessment of site allocations in support of the Local Plan 2024–2043 (Measure 3):**

Kirklees Council will continue the development of the air quality evidence base supporting the emerging Local Plan. This includes completion of district-wide air quality modelling to assess the impact of proposed site allocations and inform appropriate mitigation measures. The outcome of this work will help ensure that air quality considerations are embedded within future strategic growth and development decisions across the district.

- **Revision of the Kirklees Joint Strategic Assessment (KJSA) to reflect AQAP 2026–2031 (Measure 9):**

The Council expects to complete updates to the Kirklees Joint Strategic Assessment during the next reporting year to reflect the priorities and actions identified within the 2026–2031 AQAP. This work will help strengthen links between air quality, public health, transport, and wider environmental objectives.

- **Liaison with National Highways regarding future revocation of AQMA 8 (Measure 10):**

Kirklees Council will continue working with National Highways to review air quality conditions associated with the M62 corridor AQMA. Subject to continued compliance with air quality objectives and supporting monitoring evidence, discussions relating to the potential future revocation of AQMA 8 are expected to progress during the reporting year.

In addition, several highway and transport improvement schemes have commenced and/or have been completed across the district to improve traffic flow, reduce congestion, improve bus journey reliability, and support active travel:

- **A629 Road Improvement as part of the Halifax to Huddersfield Road Scheme (Phase 1):** Works continued during the reporting year to improve traffic flow, bus reliability, walking and cycling infrastructure, and reduce congestion along the A629 corridor. The route provides a key arterial connection between Halifax and Huddersfield Town Centre (AQMA 9) and would impact AQMA 3, AQMA 6, and AQMA 9. The scheme is expected to support improved journey times and local air quality.
- **Lockwood phase of the Huddersfield Southern Corridors (HSC):** Works commenced during the reporting year to improve traffic flow, bus movements, walking and cycling infrastructure, and public realm improvements within the Lockwood corridor. The route is a key arterial connection into AQMA 9, and the scheme is expected to help reduce congestion and support local air quality improvements.
- **Holmfirth Town Centre Access Plan:** Works commenced in July 2024 and have progressed during the reporting year to improve traffic flow, pedestrian accessibility, cycling infrastructure, and public realm within Holmfirth town centre. The scheme is expected to help reduce congestion and support improved local air quality.
- **Huddersfield Rail Station Connections scheme:** Works commenced during the reporting year to improve traffic flow, public transport connectivity, pedestrian accessibility, and cycling infrastructure within Huddersfield town centre. The scheme is located within AQMA 9 and is expected to support reduced congestion, encourage sustainable travel, and contribute to improved local air quality.

These measures are expected to contribute towards reduced vehicle emissions and improved local air quality, particularly along key transport corridors and within AQMAs.

Our priorities for the coming year are:

1. To progress revocation of AQMA 8 through continued liaison with Defra, the LAQM Helpdesk, and National Highways, where sustained compliance with air quality objectives has been demonstrated through ongoing monitoring and assessment.
2. To continue implementation of the updated Air Quality Action Plan 2026–2031 and support delivery of measures identified within the Plan through partnership working across transport, planning, climate change, and public health functions.
3. To continue working with the West Yorkshire Combined Authority (WYCA) to promote low emission transport measures, including progression of bus franchising, transition toward zero emission buses, and expansion of electric vehicle charging infrastructure to support reductions in transport-related emissions across the district.
4. To improve public awareness of air quality through delivery of smoke control and anti-idling campaigns, alongside continued participation in projects such as the West Yorkshire Public Particulate Information Improvement Project (PIIP) to help inform, engage, and influence behaviour change relating to air quality and public health.
5. To support the revision of the West Yorkshire Low Emission Strategy to ensure continued alignment between regional transport, planning, climate change, and air quality objectives.
6. To ensure that air quality continues to be appropriately considered and embedded within relevant plans, strategies, and development proposals across the district.

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

- National Highways,
- Neighbouring authorities, including Leeds City Council, Wakefield Council, City of Bradford Metropolitan District Council and Calderdale Council
- West Yorkshire Combined Authority (WYCA)
- Bus operators and public transport partners across West Yorkshire
- Developers and planning applicants
- Local communities and stakeholders through consultation and engagement exercises.

The principal challenges and barriers to implementation that Kirklees Council anticipates facing are ongoing financial pressures, the long-term nature of transport infrastructure delivery, and coordinating effectively with regional partners and third-party organisations responsible for delivering certain measures.

Progress on the following measures has been slower than expected due to:

- Completion of the Local Plan 2024–2043 and associated air quality assessment (Measure 3) is expected by 2027. Progress has been slower than originally anticipated due to the call for sites process and the need for detailed traffic and air quality modelling to inform site allocations and mitigation measures.
- The update of the Kirklees Air Quality Action Plan 2019–2024, including formal consultation, was originally expected by Defra to be completed by September 2025. This process has now commenced, with a draft AQAP submitted in May 2026.
- Delivery of the smoke control awareness campaign (Measure 11) has been slower than originally anticipated due to staff resourcing constraints within Environmental

Health. This has now been addressed through backfilling, enabling delivery of the campaign to progress.

- Progress on the West Yorkshire Public PIIP (as part of Measure 39) has been slower than originally anticipated due to external dependencies, including partner coordination, funding approvals, confirmation of suitable Zephyr locations, and structural testing requirements before installation could proceed.

We anticipate that the measures stated above and in Table 2.2 will achieve compliance in remaining AQMAs (3, 5, 6, 7, 8, 9 and 10).

We anticipate that the measures stated above and in Table 2.2 – Progress on Measures to Improve Air Quality

Table 2 will achieve compliance in several AQMAs. Whilst the measures stated above and in Table 2.2 – Progress on Measures to Improve Air Quality

Table 2 will help to contribute towards compliance, we anticipate that further additional measures not yet prescribed will be required in subsequent years to achieve compliance and enable the revocation of the remaining AQMAs (3, 5, 6, 7, 8, 9 and 10).

Table 2.2 – Progress on Measures to Improve Air Quality

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/Potential Barriers to Implementation
Planning and Policy														
1	Regulation of permitted activities which emit air pollution through Environmental Permitting Regulations	Environmental Permits	Other	Ongoing	Ongoing	Environment Agency (Part A1), Kirklees Council (Part A2 and B)	Kirklees Council Environmental Health	Fully funded	£100k - £500k	Implemented	Low-Medium. Direct regulation of emissions from permitted activities, but limited room for significant reductions	Regulation of permit conditions to ensure, where required, monitored emissions of permitted facilities are compliant, AQ monitoring in vicinity of permitted developments.	Kirklees Council continues to meet its obligations under The Environmental Permitting (England and Wales) Regulations 2016 for Part A2 and Part B processes in our district. Currently, we have 1 A2 and 105 B processes in Kirklees.	Fully funded by existing budget. Estimated cost of this measure is based upon delivering ongoing regulation over the 5 years of this Plan
2	AQ assessment of planning applications	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	Ongoing	Ongoing	Kirklees Council	Kirklees Council Environmental Health	Fully funded	£100k - £500k	Implemented	Low-Medium. Direct regulation of emissions from permitted developments, but limited room for significant reductions	Number of applications implementing actions within AQ planning guidance, AQ monitoring results in vicinity of new developments.	Continue existing actions. Updating of WYLES AQ and Planning guidance. The consultation draft of the National Planning Policy Framework was published in December 2025 with updated guidance and proposed policies. This will be reviewed by Planning Policy and Environmental Health, and procedures updated where required.	Fully funded by existing budget. Estimated cost of this measure is based upon AQ assessment over the 5 years of this Plan
3	AQ assessment of site allocations in support of the Local Plan 2024-2043	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	Ongoing	2027	Kirklees Council	Kirklees Council Environmental Health	Fully funded	£10k - £50k	Planned	Low-Medium. Direct strategic directing of new development locations and activities, but limited room for achieving reductions	Location of site allocations and status relating to current AQ and likely future AQ impacts. AQ monitoring results in vicinity of new developments.	Development of Local Plan 2024-2043 will include a detailed district wide air quality modelling exercise to determine impact of allocated development within the Plan and assist in shaping future mitigation of impact.	This measure is expected to be completed by 2027. Following completion, this will be removed from subsequent ASRs

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/Potential Barriers to Implementation
4	Adoption of Local Plan 2024-2043	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2023	2029	Kirklees Council	Kirklees Council	Fully funded	£1 million - £10 million	Planned	Low. Imbedding AQ into Local Plan is important for ensuring AQ is considered strategically, but limited room for achieving reductions	Adoption of Local Plan 2024-2043	Work started on the Kirklees Local Plan in 2023 following revision of the previous Local Plan adopted in 2019. In 2024 and 2025 there were early engagement and subsequent consultation, along with a “call for sites” for assessment in the Plan. One of the main aims of the Plan is to work towards the Council aim of net zero by 2038. The Plan will contain a specific AQ Policy following adoption.	The estimated cost includes significant cost for traffic and detailed AQ modelling to support the Plan. Local Plan Timetable
5	Delivery of Kirklees Transport Strategy	Policy Guidance and Development Control	Other policy	2025	2025	Kirklees Council	Kirklees Council	Fully funded	£10k - £50k	Implemented	High. Implementation of actions within the strategy are expected to directly reduce transport related emissions in Kirklees.	Completion of strategy actions, modal share of journeys in Kirklees, information on Kirklees fleet (e.g. Euro composition, proportion of EVs and hybrids)	The Transport Strategy was completed and adopted in September 2025. Kirklees Transport Strategy Kirklees Council	This new strategy will support and guide ongoing investments in our transport network, including: Developing improved walking, wheeling and cycling routes. Delivering new and improved bus networks, bus stations and bus franchising. Upgrading the rail network through the Transpennine Route Upgrade and the Penistone Line

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/Potential Barriers to Implementation
6	Delivery of Kirklees Climate Change Action Plan (CCAP) and Environmental Strategy	Policy Guidance and Development Control	Other policy	Ongoing	2038	Kirklees Council	Kirklees Council	Fully funded	£100k - £500k	Implemented	Medium-High. Implementation of decarbonisation actions within the strategy are expected to have direct benefits for reducing air pollutant emissions in Kirklees.	Completion of strategy actions, number of retrofits completed, modal share of journeys in Kirklees, information on Kirklees fleet (e.g. Euro composition, proportion of EVs and hybrids)	The CCAP does include actions from the Energy generation, buildings, agriculture, transport and waste which will contribute to reductions in background concentrations of NOx and PM.	Lengthy timescale in delivery actions (up to 2038), and the estimated cost reflects only the drafting of the CCAP and Environmental Strategy. In future ASRs we will briefly highlight progress with measures guided by the Plan and Strategy
7	Development and adoption of West Yorkshire Transport Strategy Local Transport Plan 4 (LTP4)	Policy Guidance and Development Control	Other policy	2026	Ongoing	WYCA	WYCA	Fully funded	£100k - £500k	Implemented	High. Implementation of actions within the strategy are expected to significantly reduce transport related emissions in Kirklees.	Completion of LTP4 actions, modal share of journeys in Kirklees, information on Kirklees fleet (e.g. Euro composition, proportion of EVs and hybrids)	A new Mayor's West Yorkshire Local Transport Plan (LTP) is being co-developed by the Combined Authority and Local Authority partners, aiming for adoption March 2026. This will be the new statutory Local Transport Plan for the region, the last plan being the Transport Strategy 2040 adopted in 2017	<p>The West Yorkshire Transport Plan was adopted on 12th March 2026 (The Mayor's West Yorkshire Local Transport Plan).</p> <p>The Plan alludes to significant measures which have been included in this AQAP (e.g. Bus Franchising, Mass Transit etc). In future ASRs we will report directly on progress with these measures</p>
8	Kirklees LAEP (Transport)	Policy Guidance and Development Control	Other Policy	2026	TBC	WYCA, Kirklees Council	WYCA and Kirklees Council	Not funded	£10k - £50k	Planned	Medium to high. This measure supports actions to decarbonise transport which will have co-benefits for air quality.	Kirklees traffic mix – e.g. number of EVs and lower emission vehicles in mix, modal share of transport.	(Specifically, the Transport element) - currently in development in partnership with the CA. Would support the development of schemes which aim to support decarbonisation of transport.	This is the source of our figure for Scenario 3 of the detailed modelling for AQMA 9 (see Section 6 and Appendix C)

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9	Revision of Kirklees Joint Strategic Assessment (KJSA) to reflect AQAP 2026 - 2031	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2027	2027	Kirklees Council	Kirklees Council	Fully funded	> £10k	Implemented	Low. KJSA- This measure is important strategically for AQ knowledge base, with indirect influence over AQ actions.	Completion of KJSA	KJSA's last updated in 2017. Currently being updated now. JSA provides link to the wider public health community.	This measure is expected to be completed by 2027. The KJSA will then likely be reviewed again with the lifetime of the AQAP
10	Liaise with National Highways over future revocation of M62 based AQMA 8	Other	Other	2026/2027	2026/2027	Kirklees Council, National Highways	Kirklees Council	Fully funded	> £10k	Planned	N/A - no target reduction in pollutant/emissions	Communications with National Highways, Revocation of AQMA 8. Communications completed with National Highways, Revocation of AQMA 8 by Summer 2027	AQMA 8 will be revoked when monitoring confirms compliance below 10% of the annual mean objective level for NO ₂ (<36 µg/m ³) for three consecutive years, at properties on the eastbound carriageway and this is approved by DEFRA.	Fully funded by existing budget. Timing of dialogue with National Highways dependent on sufficient "compliant" monitoring data
11	Targeted smoke control	Promoting Low Emission Plant	Other measure for low emission fuels for stationary and mobile sources	TBC	TBC	Kirklees Council, WYCA	Kirklees Council	Not funded	£10k - £50k	Planned	Low-medium. Level of pollutant reduction depends on successful enforcement.	Number of actions taken, including data on informal/educative communications and enforcement notices, including financial penalties, data on compliance as a result of interventions.	This project will build upon a WY report assessing (monitoring and detailed dispersion modelling) non-road emissions of PM _{2.5} , undertaken in 2024. The report concluded that targeted smoke control action (based upon the 2024 report identifying locations where health impact would be greatest) would be an effective measure in further reducing these emissions	Fully funded by existing budget and regulatory burdens funding. This measure will be incorporated into the existing staff resourcing of the Council's Environmental Health department.
Reducing Emissions from buses														

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12	West Yorkshire Bus Alliance - voluntary agreement for Euro VI or equivalent by 2026	Promoting Low Emission Transport	Public Vehicle Procurement - Prioritising uptake of low emission vehicles	2025	2026	WYCA	WYCA and bus operators	Fully funded	> £10 million	Implemented	High. Scenario modelling (scenario 2) shows that if all buses in Kirklees were Euro VI, this would reduce concentrations at diffusion tube K7 (in AQMA 9) by 4.3 µg/m³ and by an average of 1.5 µg/m³ across AQMA 9.	Number/proportion of Euro VI buses, Number/proportion of EV buses in Kirklees bus fleet	The Combined Authority is now in an Enhanced Partnership (EP) with bus operators and local authorities. This is delivered through the West Yorkshire Bus Alliance and improves the passenger experience for bus passengers in West Yorkshire. The target for EURO VI buses across West Yorkshire is a continuing target for the West Yorkshire bus services improvement plan, as well as a commitment to transition to a fully zero emission bus fleet by 2036	The current EURO split for buses in Kirklees is EURO IV 2%, EURO V 21%, EURO VI 40%, EURO VI Retrofit 38%. Although the agreement is due to be completed this year, this measure will be retained in the Plan, to monitor progress.

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13	West Yorkshire Bus Service Improvement Plan 2024. Zero emission fleet by 2036	Promoting Low Emission Transport	Public Vehicle Procurement - Prioritising uptake of low emission vehicles	2024	2036	WYCA	WYCA and bus operators	Fully funded	> £10 million	Planned	High. Scenario modelling (scenario 1) shows that if 50% of buses in Kirklees are zero emission and 50% are Euro VI, concentrations would reduce by 7 µg/m³ at K7 (AQMA 9) and by an average of 2.3 µg/m³ across AQMA 9.	Number/ proportion of EV buses in Kirklees bus fleet	When first announced in 2023, Zero Emission Bus Regional Area (ZEBRA) Phase 2 funding was intended to support the transition to zero emission buses on routes that are operated by tendered services in Calderdale and Kirklees. Following the decision to franchise the bus network in March 2024, in order to optimise the roll out of zero emission buses across the region in an equitable and proportional way, there was a strategic decision to combine this funding with ZEB phase 3 funding. ZEB phase 3 funding is a proportion of the City Regional Sustainable Travel Settlement awarded by the DfT. A benefit of franchising is the greater control the Combined Authority has over deployment of these vehicles.	Currently there are no zero emission buses operating in Kirklees. This figure will be reviewed annually within our ASRs. This is a lengthy timescale for achievement (2036)

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14	Bus franchising	Promoting Low Emission Transport	Public Vehicle Procurement - Prioritising uptake of low emission vehicles	March 2027	2036	WYCA	WYCA	Fully funded	£100k - £500k	Planned	High. Supporting Zero emission bus implementation in Kirklees. Scenario modelling shows that if 50% of buses in Kirklees are zero emission and 50% are Euro VI, concentrations would reduce by 7 µg/m³ at K7 (AQMA 9) and by an average of 2.3 µg/m³ across AQMA 9	Bus fleet mix, number of zero-emission buses in fleet.	<p>Kirklees franchised buses will be operating from April 2027, with all franchised services to be in operation across the WY region by October 2028. Bus franchising will support the decarbonisation of the local bus network, establishing a transport network that helps to reduce the overall impact of transport on carbon emissions and air quality, and increases our resilience against climate change, including via investment in zero-emission buses. Our longer-term goal is to invest in a publicly owned, zero emission bus fleet gradually over time. This will be delivered in line with our ambition of having a fully zero emission bus fleet by 2036.</p> <p>A report has been submitted to the Combined Authority meeting on 22 January 2026 which provides more information on our plans for depot electrification in Kirklees.</p>	<p>Bus franchising will provide the framework to implement measure 13 above.</p> <p>In regard to Kirklees, a report was been taken to the Combined Authority meeting on 22 January 2026 (available here) which provides more information on our plans for depot electrification in Kirklees. This paper includes details of our plans for electrification of round 1 depots, including Huddersfield, to support the roll out of electric buses from the launch of round 1 services. The report notes that the upgraded Huddersfield depot will have the capacity to support 115 electric buses (see detail here).</p>
Reducing emissions from cars														

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/Potential Barriers to Implementation
15	Local Government Electric Vehicle Infrastructure (LEVI)	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging , Gas fuel recharging	Early 2026	Dec-29	WYCA	WYCA and private providers	Fully funded	£1 million - £10 million	Implemented	Medium. This measure facilitates public uptake of electric cars. Scenario modelling (scenario 3) shows that if 31.5% of petrol and diesel cars in Kirklees are replaced with EVs, this would reduce concentrations by an average of 2.0 µg/m³ across AQMA 9.	Number of EV charge points, proportion of EVs in Kirklees local traffic mix	This project received cabinet approval in 2025, facilitating the creation of a procurement framework for Electric Vehicle Charge Point providers by WYCA, the use of the West Yorkshire Procurement Framework to appoint a provider (or providers) to deliver the LEVI project in West Yorkshire and specifically charge points in Kirklees.	Delivery commenced in early 2026

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/Potential Barriers to Implementation
16	£1 million EV infrastructure project	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging , Gas fuel recharging	2026	Dec-27	Kirklees Council, WYCA	Kirklees Council Capital funding	Fully funded	£1 million	Planned	Medium. This measure facilitates public uptake of electric cars. Scenario modelling (scenario 3) shows that if 31.5% of petrol and diesel cars in Kirklees are replaced with EVs, this would reduce concentrations by an average of 2.0 µg/m³ across AQMA 9	Number of EV charge points, proportion of EVs in Kirklees local traffic mix	To introduce more EV charging locations where LEVI/ City Regional Sustainable Transport Settlement (CRSTS) gaps emerge	The original intention of the funding was to address infrastructure gaps within non-commercial locations across Kirklees. Following the establishment of the LEVI fund, the scope of these gaps has become more defined and localised. The Council is currently reviewing submissions received through the LEVI funding process and working in collaboration with the fleet team to identify any remaining gaps in provision

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/ Potential Barriers to Implementation
17	ULEV parking permits	Promoting Low Emission Transport	Priority parking for LEVs	Ongoing	Under Review	Kirklees Council	Council Corporate revenue	Fully funded	> £10k	Implemented	Low. This soft measure may have an influence on uptake of LEVs and may influence AQ in any designated priority ULEV parking locations.	Number of ULEV parking permits issued/ applied for	ULEV permits were introduced in 2020/21. Initially free, moving to an annual charge in 2023. In accordance with a Cabinet decision, the ULEV permit offer will now be reviewed to determine if the original aims and objectives have been met. Review to take place in Spring/Summer 2026	<p>Approval from service director and portfolio holder.</p> <p>ULEV green permit and decision to continue will be undertaken later this year.</p> <p>Local elections in May leading to change of portfolio holder – delay in review outcome.</p> <p>The outcome of this will be reported in our 2027</p>
Improving traffic flow														
18	A62 Cooper Bridge Corridor Improvement Scheme (AQMA 1)	Traffic Management	Strategic highway improvements	2029	2029	Kirklees Council Major Projects	Capital Transport Fund	Fully funded	> £10 million	Planned	Medium-High. Implementation of scheme will have direct benefits for local area	Completion of Scheme	Impact in now revoked AQMA 1 (Cooper Bridge). One of the scheme objectives is improvement in AQ. This scheme will help maintain improved AQ in the area	<p>Measures to be introduced is the same year as scheme completion.</p> <p>Construction will start early 2028 and will last approximately 18 months. However, the exact duration length will be determined by the contractor once appointed.</p>
19	Phase 5, A629 Halifax to Huddersfield Road scheme (AQMA 3 and 6)	Traffic Management	Strategic highway improvements	Phase 1 2025 Phase 2 2027	Phase 1 2025 Phase 2 2027	Kirklees Council Major Projects	Capital Transport Fund	Fully funded	> £10 million	Implemented	Medium-High. Implementation of scheme will have direct benefits for local area	Completion of Scheme	Impact in AQMA 3 (Ainley Top) and 6 (Edgerton). Additional measures (upgrade of Microprocessor Optimised Vehicle Actuation, MOVA) in AQMA 6. Also, active travel improvements along the corridor. One of the scheme objectives is improvement in AQ.	Phase 1 is defined as AQMA 6 (Edgerton), this was completed in 2025 – Phase 2, (AQMA 3, Ainley Top) is estimated to be completed in 2027

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20	Continuing development of network's Urban Traffic Management Control (UTMC) systems	Traffic Management	UTC, Congestion management, traffic reduction	Ongoing	Ongoing	Kirklees Council	WYCA, subject to future funding	Fully funded	£1 million - £10 million	Implemented	Medium-High. This contributes to lower congestion, in turn lower emissions of NOx and PM.	Number of UTMC suitable modes of operation in place, AQ monitoring results in locations with UTMC	Continue to implement adaptive urban traffic control system to co-ordinate and dynamically optimise traffic flow, in line with current and future processes, systems and technologies. This will contribute to lower congestion, in turn lower emissions of NOx and PM.	Continuing development of UTMC systems dependent on securing of ongoing funding
21	Development and delivery of Bus Hotspots scheme, aiming to ease congestion and improve bus journey times and reliability	Traffic Management	Other	Ongoing	Ongoing	Kirklees Council	WYCA, subject to future funding	Fully funded	£1 million - £10 million	Implemented	Medium. Implementation of scheme should have direct benefits for areas where bus services are impacted by congestion.	Delivery of scheme, bus journey times, service use and/or ratings	Range of interventions planned across the district, includes the procurement of software which will make identification of hotspots in district easier to support future scheme delivery	Continued implementation of this scheme is subject to a current assessment of bus hotspots and the impact of future bus franchising in WY
22	Development of bus priority network management system within AQMA 9	Traffic Management	Selective vehicle priority, bus priority, high vehicle occupancy lane	TBC	TBC	Kirklees Council	WYCA, subject to future funding	Not funded	TBC	Planned	Medium. Implementation of scheme should have direct benefits where bus services in AQMA 9 are impacted by congestion.	Delivery of system, bus journey times, service use and/or ratings	Proposal is based around junction of Trinity Street and Castlegate providing bus priority.	This is dependent on LTP 4.
23	Moving Traffic Enforcement Powers at three trial sites	Traffic Management	Other	Late 2026	Ongoing	Kirklees Council	Council budget	Fully funded	£100k - £500k	Planned	Low. AQ benefit is dependent on the Powers successfully dissuading high emission vehicle behaviours.	Instances of use of moving traffic powers, nature of incidents (did they involve high emission vehicle behaviours?).	Approved at Cabinet January 2026. Planned implementation late 2026.	6-to-12-month trial period at 3 locations in the district. On completion of the trial, an assessment to continue will be made
Active travel														
24	Development of WY Active Travel Strategy & 'Vision'	Promoting Travel Alternatives	Intensive active travel campaign & infrastructure	March 2026	WYCA to confirm	WYCA	WYCA	Fully funded	£1 million - £10 million	Planned	Low. A soft measure, and AQ benefit is dependent on uptake of active travel.	Adoption of Strategy, and implementation of actions	In development. Initially a vision is in development and expected that this will develop to a full strategy in future years	West Yorkshire Places Your Voice

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/ Potential Barriers to Implementation
25	Delivery of Huddersfield Town Centre Sustainable Transport Schemes	Promoting Travel Alternatives	Intensive active travel campaign & infrastructure	Ongoing	Ongoing	Kirklees	Various	Not funded	Various range of projects , unable to quantify at this stage	Planned	Low. A soft measure, and AQ benefit is dependent on uptake of active travel.	Delivery of actions/measures within the framework	Requires funding, currently being sought. A high-level framework for future movements in Huddersfield town centre prioritising public transport and active travel modes.	Requires funding. Progress with this project will be reported in future ASRs.
26	Development and delivery of active travel infrastructure schemes	Transport Planning and Infrastructure	Cycle and pedestrian networks	Ongoing	Ongoing	Kirklees	Various	Partially funded	Various range of projects , unable to quantify at this stage	Planned	Low. A soft measure, and AQ benefit is dependent on uptake of active travel.	Number of schemes completed	Rolling programme of network mapping, pipeline development and scheme delivery based upon when funding can be secured. Further funding required and being sought for post 2026	Further funding required and being sought for post 2026 Progress with this project will be reported in future ASRs
27	Delivery of active travel behaviour change programme	Promoting Travel Alternatives	Intensive active travel campaign & infrastructure	Ongoing	Ongoing	Kirklees Council	Various	Partially funded	Funding yet to be confirmed for 27/28	Implemented	Low. A soft measure, and AQ benefit is dependent on uptake of active travel.	Number of events delivered participation rates	Includes community events, widening participation activities, schools work, cycle storage and cycle training.	Rolling programme based upon when funding can be secured. Further funding required and being sought post 2026. Progress with this project will be reported in future ASRs.
28	Delivery of Modeshift Stars initiative in schools to encourage modal shift.	Promoting Travel Alternatives	Promotion of walking; Promotion of cycling	Ongoing	Ongoing	Kirklees Council	Council Budget / Active Travel England / West Yorkshire Combined Authority (modeshift subscription only for the district)	Fully funded	< £10k - £50k	Implemented	Low. A soft measure, and AQ benefit is dependent on uptake of active travel.	Number of schools signed up and the accreditation level of each school.	To encourage sustainable travel to school by implementation of various travel initiatives (park and stride - walking bus etc). Total of 58 schools signed up currently.	Total of 58 schools signed up currently.

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29	Bikeability training for children	Promoting Travel Alternatives	Promotion of walking;	Ongoing	Ongoing	Kirklees Council	Mainly Active Travel England (Bikeability Trust Grant) with West Yorkshire Combined Authority top up for balance.	Fully Funded	£100k - £500k	Implemented	Low. A soft measure, and AQ benefit is dependent on uptake of active travel.	Number of children participating in the scheme of each level of bikeability plus the additional balance training for early years.	Continued yearly delivery with 4 providers across the district	This scheme is an ongoing project to provide access and training to children on the use of cycling with the long-term goals to promote cycling as a leisure activity and a mode of transport.
Public transport														
30	Transpennine Route Upgrade (TRU)	Transport Planning and Infrastructure	Public transport improvements- interchanges stations and services	2021	2032 *	Department for Transport (D	Department for Transport	Fully funded	> £10 million	Implemented	Low to medium. AQ benefit is dependent on uptake of rail, and level to which rail journeys replace private vehicle journeys or road freight post-completion.	Completion of upgrade. Electrification of the Line	This is a significant capital infrastructure for the north of England, improving connectivity between Leeds, Huddersfield and Manchester. Work has commenced on those sections within Kirklees	<p>Timescale is for the W3B section of the Scheme. Benefits to be delivered in a 5–10-year timeframe.</p> <p>As Huddersfield Railway station is located within AQMA 9, electrification of the line will eventually assist in reducing NOx emissions. Submission of the W2C section Gledholt Tunnel to Standedge Tunnel Transport and Works Act Order (TWAO) expected 2026, will impact AQMA 9 and 10.</p> <p>TRU upgradehttps://thetrupgrade.co.uk/</p>

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/ Potential Barriers to Implementation
31	Penistone Line	Transport Planning and Infrastructure	Public transport improvements- interchanges stations and services	TBC	TBC	Kirklees Council	Kirklees Council via the Levelling Up Fund	Fully funded	> £10 million	Planned	Low to medium. AQ benefit is dependent on uptake of rail, and level to which rail journeys replace private vehicle journeys or road freight post-completion.	Completion of upgrade, number of passengers and journeys	Kirklees Council was awarded £48 million in 2025 to improve the Penistone Line between Huddersfield and Sheffield. An improved, more attractive line will assist with modal shift away from the car to public transport	Benefits to be delivered in a 5-year timeframe.
32	Mass Transit - Dewsbury Line Development Project	Transport Planning and Infrastructure	Public transport improvements- interchanges stations and services	Not to be delivered until the mid-2030s, after Phase 1 - Leeds and Bradford	2040	WYCA	DfT Transport for City Regions Fund	Fully funded	> £10 million	Planned	Medium to high. This new public transport route is likely to achieve some modal shift from private vehicle use, reducing journeys by private vehicle.	Completion of upgrade, number of passengers and journeys	A Strategic Outline Case is proposed to be submitted to Government later this year	Not to be delivered until the mid-2030s, after Phase 1 - Leeds and Bradford
Council fleet and workplace travel														
33	Kirklees fleet "Vehicle Replacement Programme" (VRP)	Promoting Low Emission Transport	Council fleet Vehicle Procurement - Prioritising uptake of low emission vehicles	2025	2031	Kirklees Council	Kirklees Council Capital Plan	Fully funded	£21.7 million	Implemented	Medium. This measure involves direct replacement of higher emission vehicles with lower emission vehicles.	Euro and fuel type % composition of Kirklees fleet.	Replacement of existing vehicles with EURO VI (latest variant), and future EURO VII adoption. Potentially replace some of the van fleet with EVs, following further feasibility studies and continue to monitor the EV market for suitability of vehicles to meet individual service operational delivery models.	Progress with this rolling programme will be reported in future ASRs
34	Pool vehicles for council staff	Alternatives to private vehicle use	Car & lift sharing schemes	Ongoing	Ongoing	Kirklees Council	Kirklees Council	Fully funded	£500k - £1 million	Implemented	Low. AQ benefit is dependent on uptake, likely a relatively small pool of users.	Frequency of use	The use of pool cars is embedded within Council procedures, including the provision of a driver's handbook for use of pool cars	

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/Potential Barriers to Implementation
35	EV salary sacrifice scheme	Promoting Low Emission Transport	Other	2025	2030	Kirklees Council	N/A	Fully funded	Costs met by the employee	Implemented	Low. A relatively low level of emissions reduction.	Number of council employees participating in the scheme.	Implementation of Ultra Low Emission Vehicles (ULEVs) Salary Sacrifice Scheme began Sept 2025 and will be a 5-year contract	Vehicle options are restricted to ULEVs, which are defined as a low emission car that emits 75g/km CO ₂ or less, based on the NEDC test. ULEVs include pure electric vehicles, electric range-extender vehicles, and plug-in hybrids (PHEVs).
Taxis														
36	EV taxis (with WYCA)	Promoting Low Emission Transport	Taxi emission incentives	Ongoing	Dec-30	Kirklees Council, WYCA	WYCA	Fully funded	£1 million - £10 million	Implemented	Low. This measure encourages replacement of higher emission vehicles with lower emission vehicles but is dependent on uptake by taxi operators.	Number of charge points available for taxis and private hire vehicles, rates of charge point use	The Ultra-Low Emission Vehicle (ULEV) taxi scheme aims to reduce air pollution by installing free-to-use charging points for electric vehicles and encouraging taxi and private hire drivers to switch from diesel to electric vehicles. Each two-bay charge point included one bay dedicated for taxi and private hire vehicle use.	The project, led by the West Yorkshire Combined Authority, remains ongoing with funding in place. The Council is currently assessing the feasibility of installing a limited number of additional charge points as part of the scheme.
37	Enforcement of emission limits via Kirklees Hackney Carriage and Private Hire Policy	Promoting Low Emission Transport	Taxi Licensing conditions	Ongoing	Ongoing	Kirklees Council Licencing	Kirklees Council	Fully funded	£10 - £50k	Implemented	Low-medium. This measure requires replacement of higher emission vehicles with lower emission vehicles.	Number of ULEVs	EURO V petrol, EURO VI diesel (except WAVs) at first licensing, encourage uptake of ULEVs	All licensed vehicles must meet the Kirklees Council vehicle specification Appendix D - Vehicle Specification. Taxi drivers are required to fund their own vehicles, there is no monetary incentive for them.

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/Potential Barriers to Implementation
38	Hackney carriage and Private Hire anti-idling at taxi ranks	Traffic Management	Anti-idling enforcement	TBC	TBC	Kirklees Council Licensing	Kirklees Council	Fully funded	£10 - £50k	Planned	Low. Level of pollutant reduction depends on successful enforcement.	Number of enforcement events, frequency of enforcement activity	Based upon Calderdale policy, where the first two hackney carriages can idle, but the remaining hackney carriages in the rank cannot. Enforcement in Calderdale undertaken by a combination of Licensing and Environmental Health staff on a periodic basis, using the 2002 anti-idling regulations. Kirklees have now applied to the Secretary of State (SoS) for these powers.	<div>Currently there are 224 hackney carriages in Kirklees (this is the maximum allowed) and 2624 PHVs. Licensing is aware of a significant number of taxis operating in Kirklees which have been registered elsewhere, but numbers are not known.</div> <div>Discussions to be held in 2026 and reported in 2027 ASR on feasibility of taking this measure forward</div>
Public information and awareness														

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/Potential Barriers to Implementation
39	Monitoring of air quality for public information purposes	Public Information	Via the Internet	Ongoing	Ongoing	Kirklees Council	Kirklees Council	Partly funded	£50k - £100k	Implemented	Low. Monitoring is important for the AQ knowledge base, with indirect influence over AQ actions.	Publication of AQ monitoring data and annual AQ reports	Including the West Yorkshire Public Particulate Information Improvement Project (PIIP) monitoring PM _{2.5} and air quality dashboard has been established	<p>Air quality dashboard The particulate monitors are not funded through baseline budgets and therefore additional funding will be required to extend the use of these beyond their current subscriptions end date (October 2027)</p> <p>The current West Yorkshire air quality dashboard is funded until September 2026, after which time additional funding will be required to extend this dashboard if a suitable, in-house dashboard cannot be developed.</p> <p>We will report of particulates in our ASR.</p>
40	Awareness campaign for smoke-control area	Public Information	Via the Internet, Via other mechanisms	TBC	TBC	Kirklees Council	Kirklees Council	Fully funded	£10k - £50k	Planned	Low. This is a soft measure, impact to AQ/ emissions is dependent on behaviour change by members of the public, which cannot be guaranteed.	Number of people/ households/solid fuel vendors reached by campaign, number of smoke-control rule breaches	Educative initiative for vendors of solid fuels undertaken in 2024/2025. This project will build upon a WY report assessing (monitoring and detailed dispersion modelling) non-road emissions of PM _{2.5} , undertaken in 2024.	Fully funded by existing budgeted and regulatory burdens funding. This measure will be incorporated into the existing staff resourcing of the Council's Environmental Health dept. A work programme will have to be devised which can both accommodate existing statutory work and this measure

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/Potential Barriers to Implementation
41	Awareness campaign for anti-idling	Public Information	Via the Internet, Via other mechanisms	TBC	TBC	Kirklees Council	Kirklees Council	Fully funded	£10k - £50k	Planned	Low. This is a soft measure, impact to AQ/ emissions is dependent on behaviour change by members of the public, which cannot be guaranteed.	Number of people/households/schools reached by campaign, number of anti-idling education events.	There has been previous engagement with ward members etc over potential anti-idling campaigns, particularly around schools. The lessons learned from this dialogue will be useful in future consideration of this measure.	Fully funded by existing budget. This measure will be incorporated into the existing staff resourcing of the Council's Environmental Health department

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 Strategy², 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.

The health burden of air pollution is substantial. Globally, the World Health Organization estimates that air pollution contributes to approximately 6.7 million premature deaths³ each year. Within the UK, recent evidence from the Royal College of Physicians estimates that air pollution contributes to around 30,000 deaths annually⁴. The associated economic burden is estimated at approximately £27 billion per year, potentially rising to £50 billion when wider societal impacts are included⁵.

The Environment Act 2021 introduced a legally binding annual mean PM_{2.5} target of 10 µg/m³ to be achieved across England by 2040, alongside a population exposure reduction target. The UK Government's Environmental Improvement Plan (EIP)⁶ and Clean Air Strategy⁷ also identify reducing PM_{2.5} emissions and exposure as national priorities.

The Public Health Outcomes Framework introduced a “new method” of calculation for modelling annual mean concentrations fine particulate matter (PM_{2.5})⁸. Under this methodology, the reported total PM_{2.5} in Kirklees was 7.0 µg/m³ in 2024. This was marginally higher than the regional figure of 6.9 µg/m³ and slightly lower than the England figure of 7.1 µg/m³. We will continue to report of this data in future ASRs.

Measured PM_{2.5} data are also available from the continuous monitor at the Dewsbury Ashworth Grange (CM1) AURN site. Annual mean concentrations recorded at the site increased from 7.4 µg/m³ in 2023 to 8.0 µg/m³ in 2024 and 8.8 µg/m³ in 2025. Although concentrations increased over this period, they remained below the annual mean target of 10 µg/m³ in each of the past three years.

² Defra. Air Quality Strategy – Framework for Local Authority Delivery, August 2023

³ World Health Organization. (n.d.). *Types of pollutants*. Retrieved June 29, 2026, from <https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants>

⁴ Royal College of Physicians. (2025). *A breath of fresh air: Responding to the health challenges of modern air pollution—Summary for policymakers*. London, England. Retrieved from <https://www.rcp.ac.uk/media/uhujk1zw/140725-update-rcp-summary-for-policymakers-a-breath-of-fresh-air-responding-to-the-health-challenges-of-modern-air-pollution.pdf>

⁵ Royal College of Physicians. (2025). *A breath of fresh air: Responding to the health challenges of modern air pollution—Summary for policymakers*. London, England. Retrieved from <https://www.rcp.ac.uk/media/uhujk1zw/140725-update-rcp-summary-for-policymakers-a-breath-of-fresh-air-responding-to-the-health-challenges-of-modern-air-pollution.pdf>

⁶ Department for Environment, Food & Rural Affairs. (2025). *Environmental Improvement Plan (EIP) 2025*. London, England: Author. Retrieved from <https://www.gov.uk/government/publications/environmental-improvement-plan-2025/environmental-improvement-plan-eip-2025>

⁷ Department for Environment, Food & Rural Affairs. (2019). *Clean Air Strategy 2019*. London, England: Author. Retrieved from <https://assets.publishing.service.gov.uk/media/5c3b9debe5274a70c19d905c/clean-air-strategy-2019.pdf>

⁸ Office for Health Improvement and Disparities (OHID), Public Health Outcomes Framework (PHOF): Air pollution, fine particulate matter (new method - concentrations of total PM_{2.5}). Available at: <https://fingertips.phe.org.uk/indicator-list/view/0tXtHd6k9E>

PM_{2.5} arises from a range of sources including road transport, domestic solid fuel burning, industry and construction activities⁶. Effective action to reduce PM_{2.5} concentrations and exposure therefore requires a coordinated approach across Council services and external partners. As such, Kirklees Council is taking the following measures to address PM_{2.5}:

1. PM_{2.5} continues to be included as a key indicator for the Health and Wellbeing Board.
2. The entire Council area is a smoke control area, and we continue to enforce smoke control legislation. Between April 2025 and March 2026:
 - We received 32 complaints or enquiries about smoke from domestic chimneys. During this period, we did not service any notices or undertake prosecutions. Warning letters were sent to 7 premises.
 - We received nine complaints or/enquiries regarding smoke from industrial chimneys.
 - We did not serve any notices or undertake prosecutions.
3. Collaborative working between Public Health, Environmental Health, Planning and Highways is ongoing to support the development of a district-wide PM_{2.5} baseline air quality model. This work will improve understanding of emission sources and spatial distribution and will inform future policy and planning decisions. Outcomes of this work will be reported in future ASRs.
4. The Council's existing AQAP includes measures to reduce emissions from transport, domestic and industrial sources. A new AQAP (2026–2031) has been submitted to Defra and includes measures to reduce sources of PM_{2.5} and NO_x.
5. A PM_{2.5} monitor was continuously monitors air quality at the Dewsbury Ashworth Grange AURN monitoring site. The data is detailed in this report.
6. In 2025, a regional project involving West Yorkshire Combined Authority (WYCA), the West Yorkshire local authorities, and regional universities developed a regional PM_{2.5} monitoring network. This is supported by a public-facing website providing data and highlighting actions to reduce emissions and exposure. The regional air quality dashboard went live in July 2025, providing public access to PM_{2.5} monitoring data. Kirklees contributed to the development of information presented on the website.

The dashboard (available at: <https://www.westyorks-ca.gov.uk/resources/air-quality-dashboard/>) allows users to:

- View near real-time particulate pollution data across the region
- Explore trends and spatial variation in PM_{2.5} concentrations
- Access information on health impacts of air pollution
- Find guidance on reducing emissions and personal exposure

In 2025, Kirklees supported the extension of the regional contract for 28 Zephyr monitors across West Yorkshire, including six monitors located within Kirklees, until October 2027. Data from the network will continue to be used to:

- Continue to increase public awareness and understanding of the sources and health impacts of particulate air pollution
- provide single point of public access to regional PM data
- provide advice to reduce PM exposure via a dedicated public facing PM information webpage hosted on the WYCA website
- This project also will be reported in more detail in next years' ASR.

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

This section sets out the monitoring undertaken within 2025 by Kirklees 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

Kirklees Council undertook automatic (continuous) monitoring at one site, Dewsbury Ashworth Grange, during 2025. Table A.1 – Details of automatic monitoring site

in Appendix A shows the details of the automatic monitoring sites. NB. Local authorities do not have to report annually on the following pollutants: 1,3 butadiene, benzene, carbon monoxide and lead, unless local circumstances indicate there is a problem. Appendix A presents automatic monitoring results for Kirklees, with automatic monitoring results also available through the UK-Air website.

Maps showing the location of the monitoring sites are provided in Appendix D. Further details on how the monitors are calibrated and how the data has been adjusted are included in Appendix C.

AURN automatic monitoring site CM1 (Dewsbury Ashworth Grange) site forms part of the Automatic Urban Monitoring Network (AURN). It currently monitors NO_x, NO₂, PM₁₀, PM_{2.5}, and Ozone (O₃).

Kirklees Council undertook monitoring at six sites during 2025 using Zephyr real-time sensors. While the Zephyr provides useful indicative data, it is not currently recognised by Defra and is not approved for use as a primary method for statutory LAQM reporting. As such, the results have not been included within the formal assessment presented in this report. Monitoring will continue to support understanding of local air quality trends.

3.1.2 Non-Automatic Monitoring Sites

Kirklees Council undertook non- automatic (i.e. passive) monitoring of NO₂ at 92 sites during 2026. Table A.2 – Details of non-automatic monitoring sites

in Appendix A presents the details of the non-automatic sites. 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 using the national bias adjustment factor, annualised (where the annual mean data capture is below 75% and greater than 25%), and distance corrected. Further details on adjustments are provided in Appendix C.

3.2.1 Nitrogen Dioxide (NO₂)

Table A.3 and Table A.4 in Appendix A compare the ratified and adjusted monitored NO₂ annual mean concentrations for the past five years with the air quality objective of 40 µg/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.5 in Appendix A compares the ratified continuous monitored NO₂ hourly mean concentrations for the past five years with the air quality objective of 200 µg/m³, not to be exceeded more than 18 times per year.

During 2025, the continuous NO₂ analyser located at Dewsbury, Ashworth Grange (CM1) achieved a data capture rate of 91.4%. The annual mean NO₂ concentration measured at this site was 16.6 µg/m³, which is well below the annual mean air quality objective of 40 µg/m³. Compliance with this objective has been maintained over the past five years.

No exceedances of the 1-hour mean objective (200 µg/m³) were recorded during the year, indicating continued compliance with the short-term NO₂ air quality objective.

In 2025, there are 124 diffusion tubes (92 sites) with valid data capture for 2025, 65 of these tubes are new additions for the monitoring period 2025. Of the 124 diffusion tubes in Table A.4, four measured an exceedance of the annual mean NO₂ objective of 40 µg/m³ at the monitoring location (following the application of bias adjustment and annualisation as required). Monitoring results are summarised below, with detailed assessments for each AQMA presented in subsequent sections.

From greatest exceedance to smallest, they are:

- 44.9 µg/m³ at diffusion tube 183 (Westgate, Huddersfield Triplicate) in AQMA 9
- 44.3 µg/m³ at diffusion tube 145 (Westgate, Huddersfield Triplicate) in AQMA 9
- 41.9 µg/m³ at diffusion tube 184 (Westgate, Huddersfield Triplicate) in AQMA 9
- 41.5 µg/m³ at diffusion tube 144 (Westgate, Huddersfield) in AQMA 9.

Following application of NO₂ fall-off with distance from the road corrections, there remain two exceedances of the annual mean NO₂ objective of 40 µg/m³ at receptor locations which are representative of relevant exposure. They are:

- 41.0 µg/m³ at diffusion tube 183 (in AQMA 9)
- 40.4 µg/m³ at diffusion tube 145 (in AQMA 9)

There are eight additional sites measuring within 10% of the objective (≥ 36 µg/m³). These are:

- 39.3 µg/m³ at diffusion tube 165 (AQMA 5)

- 38.9 $\mu\text{g}/\text{m}^3$ at diffusion tube 164 (AQMA 5)
- 38.9 $\mu\text{g}/\text{m}^3$ at diffusion tube 151 (AQMA 10)
- 38.7 $\mu\text{g}/\text{m}^3$ at diffusion tube 40 (AQMA 5)
- 38.2 $\mu\text{g}/\text{m}^3$ at diffusion tube 169 (AQMA 10)
- 37.3 $\mu\text{g}/\text{m}^3$ at diffusion tube 199 (Leeds Road, Huddersfield)
- 37.1 $\mu\text{g}/\text{m}^3$ at diffusion tube 77 (AQMA 10)
- 36.9 $\mu\text{g}/\text{m}^3$ at diffusion tube 168 (AQMA 10)

There are no instances of the annual mean exceeding 60 $\mu\text{g}/\text{m}^3$ in 2025 and therefore the risk of exceeding the 1-hour objective at any locations is very low.

No exceedances of the annual mean NO_2 objective were identified at locations outside of existing AQMAs; therefore, there is no requirement to declare any new AQMAs or amend existing boundaries. Monitoring results for 2025 indicate that there is potential to revoke AQMA 8. This position has been informed by a review of monitoring undertaken in recent years, as first reported in the 2025 ASR. Annual mean NO_2 concentrations within the AQMA have remained below 36 $\mu\text{g}/\text{m}^3$ (i.e. within 10% of the annual mean objective) for the past six years. In the 2025 ASR, it was noted that there was limited monitoring representative of exposure adjacent to the eastbound carriageway, and that data capture for newly installed diffusion tube 141 was below 75%. As a result, further monitoring was required before revocation could be considered.

To address this, additional monitoring locations (DT181 and DT182) were introduced within the AQMA in late 2024 and fully reported for the first time in 2025. The recorded annual mean NO_2 concentrations at these sites were 20.9 $\mu\text{g}/\text{m}^3$ and 23.4 $\mu\text{g}/\text{m}^3$ respectively, which are well below 36 $\mu\text{g}/\text{m}^3$. These results provide further confidence that concentrations across AQMA 8, including at locations representative of relevant exposure on both sides of the motorway, are below the annual mean objective.

On this basis, Kirklees Council will seek to revoke of AQMA 8, subject to consultation with the LAQM Helpdesk and Defra.

Existing AQMAs continue to capture the locations of exceedances and highest concentrations. Although some exceedances remain, they are localised and consistent with known hotspots. Concentrations at many sites within AQMAs are now below the objective or showing improvement, indicating progress from ongoing interventions.

It should be noted that interpretation of recent trends is affected by reduced data capture (<75%) in 2024 due to a change in contractor, as discussed in the [2025 ASR](#). Although annualised in line with Defra QA/QC guidance, this introduces some additional uncertainty when comparing 2024 results with other years.

AQMA 3 – Ainley Top

AQMA 3 was declared in 2017 due to an exceedance in the annual mean objective for NO_2 . This AQMA encompasses a section of the A629 Halifax Road to the south-east of the roundabout, as shown in Figure D.1 in Appendix D. Historically, this AQMA was split into two sections and also included a section of the A643 Lindley Moor Road to the west. The AQMA was amended in November 2025 to exclude this area. Monitoring has not continued within the Lindley Moor section of AQMA 3 following the amendment, as long-term monitoring demonstrated sustained compliance with the annual mean NO_2 objective, with concentrations well below the objective including 24.0 $\mu\text{g}/\text{m}^3$ in 2024.

Monitoring within the amended AQMA in 2025 was undertaken at diffusion tubes 133 and triplicate 134 (tubes 134, 177, and 178). Historically, diffusion tube monitoring has also been undertaken adjacent to, but just outside, the AQMA boundary (tubes 16 and 17), to provide an indication of roadside NO₂ concentrations on the uphill carriageway. Results at these locations have consistently remained below the annual mean objective, with tube 16 demonstrating compliance between 2019 and 2023, and tube 17 remaining below the objective for the period 2020–2024. Monitoring at these locations was discontinued in 2025 due to the A629 Phase 1 Ainley Top Road improvement scheme, which restricted access.

Monitoring results from 2025 demonstrate continued compliance with the annual mean NO₂ objective across all monitoring locations within the AQMA. Concentrations at diffusion tube 133 reduced from 38.0 µg/m³ in 2024 to 33.9 µg/m³ in 2025, falling below 36 µg/m³ for the first time. Diffusion tube 134 recorded a concentration of 23.6 µg/m³, with co-located tubes 177 and 178 also recording similar concentrations of 23.4 µg/m³ and 24.9 µg/m³ respectively. These results demonstrate that concentrations are well below the objective.

Overall, the 2025 dataset provides a robust evidence base demonstrating compliance across the AQMA. However, as 2025 represents the first full year in which concentrations at monitoring locations have fallen below 36 µg/m³, it is considered appropriate **to retain AQMA 3 at this time** to confirm sustained compliance prior to considering revocation. Monitoring will continue to support this assessment.

AQMA 5 – Eastborough

AQMA 5 was declared in 2017 due to exceedance of the annual mean objective for NO₂. Figure D.2 in Appendix D shows the spatial extent of this AQMA. Since last year's annual status report, diffusion tubes 164 and 165 were installed as triplicates alongside tube 40 to improve data robustness and provide greater confidence in the monitoring results at this location.

Monitoring within AQMA 5 continued during 2025 at Leeds Road (tube 40) with co-located triplicate tubes (tubes 164 and 165). Additional monitoring was undertaken at surrounding locations (sites 20, 42, 43 and 44) to provide a broader assessment of concentrations within and adjacent to the AQMA.

In 2025, diffusion tube 40 recorded an annual mean NO₂ concentration of 38.7 µg/m³ prior to distance correction, reducing to 36.3 µg/m³ at relevant exposure. The triplicate tubes recorded concentrations of 38.9 µg/m³ and 39.3 µg/m³, reducing to 36.5 µg/m³ (tube 164) and 36.8 µg/m³ (tube 165) following distance correction. All tubes are therefore compliant with the annual mean objective of 40 µg/m³ at relevant exposure. However, tubes 40, 164 and 165 remain above 36 µg/m³ following correction, indicating concentrations within 10% of the objective.

This represents a continued reduction in annual mean NO₂ concentrations at relevant exposure, with concentrations at tube 40 decreasing from 50.2 µg/m³ in 2021 to 38.7 µg/m³ in 2025. This is a significant improvement compared to historic concentrations, which reached 50.8 µg/m³ in 2019 and is welcomed.

Diffusion tube 20 (Rockley Street) also recorded compliance with the annual mean objective in 2025 (28.5 µg/m³) and has shown an overall downward trend over the past five years reducing from 33.1 µg/m³ in 2021, and 28.5 µg/m³ respectively). This indicates

improving air quality at this location and supports the wider declining trend observed within the AQMA.

Monitoring at surrounding locations moving eastward along the A653 Leeds Road, outside of the AQMA (tubes 42, 43 and 44), also recorded concentrations below 36 µg/m³ and are therefore within 10% of the annual mean objective for NO₂.

Long-term trend data at site 40 demonstrate a sustained reduction in annual mean NO₂ concentrations over the past five years, decreasing from 50.2 µg/m³ in 2021 to 38.7 µg/m³ in 2025. This represents a reduction of approximately 11.5 µg/m³ over the five-year period and a transition from exceedance to compliance at relevant exposure.

This downward trend is supported by data from surrounding monitoring locations. Compared with previous years, the results demonstrate a clear improvement in air quality within AQMA 5, with no exceedances at monitoring locations or relevant exposure points in 2025.

The reporting year 2025 represents the first year of full compliance with the annual mean objective at relevant exposure within this AQMA. Whilst this is a positive outcome, concentrations at some tubes remain within 10% of the objective, and not all tubes are consistently below 36 µg/m³ following distance correction.

Therefore, we intend to continue monitoring to confirm sustained compliance. If concentrations at relevant exposure remain below 36 µg/m³ across all tubes for a further two consecutive years, the Council will consider revocation of this AQMA. **At present, it is considered appropriate to retain AQMA 5**, and measures to further reduce emissions within this area are included within the Council's updated Air Quality Action Plan.

AQMA 6 – Edgerton

Figure D.3 in Appendix D shows the spatial extent of this AQMA. This AQMA was declared in 2017 due to exceedance of the annual mean objective for NO₂. This small AQMA covers seven residential properties at the junction of A629 Halifax Road and Blacker within Edgerton, Huddersfield. Whilst exceedances have been recorded at roadside locations in recent years, concentrations at relevant exposure have consistently remained below the annual mean objective since 2019, including in 2025.

Monitoring within and adjacent to the AQMA has been expanded in recent years to provide a more comprehensive evidence base. Nine diffusion tube locations within and adjacent to the AQMA were operational during 2025, including six that were introduced in 2024. Whilst some of the newer locations did not achieve full data capture in 2024, data capture improved in 2025, and all tubes achieved sufficient data capture for inclusion in this year's assessment.

All monitoring locations recorded compliance with the annual mean NO₂ objective of 40 µg/m³ in 2025. Following distance correction to the nearest relevant exposure, concentrations at all tubes were below 36 µg/m³ (i.e. within 10% of the objective), as presented in Table A.4a (Appendix A).

Long-term trend data indicate that concentrations at diffusion tube 3 (within the AQMA) exceeded 36 µg/m³ in 2021 and 2022 but have since declined and remained below this threshold in 2023, 2024 and 2025. This downward trend is supported by data from surrounding monitoring locations. Figure A.1 (Appendix A) demonstrates consistent compliance within the AQMA and surrounding area in recent years.

A major road scheme along the A629 Halifax Road corridor, granted planning permission in 2023, affects this AQMA. Phase 1 of the scheme (Edgerton) was completed in 2025, with Phase 2 (Ainley Top) ongoing and expected to be completed in 2027. This route forms a key link between Junction 24 of the M62 and Huddersfield town centre. The air quality impact assessment supporting the scheme identified a “slight adverse” impact at receptors within AQMA 6, with sensitivity testing indicating the potential for a “moderate adverse” impact. The assessment predicted an increase of approximately $1.2 \mu\text{g}/\text{m}^3$ in annual mean NO_2 concentrations at the Halifax Road / Blacker Road junction, associated with increased queuing traffic.

As part of the scheme, a MOVA adaptive traffic signal control system has been implemented at the junction to improve traffic flow and reduce congestion, thereby mitigating potential air quality impacts.

Based on monitoring data to date, there is no clear evidence that the predicted increase in NO_2 concentrations has been realised. Concentrations within AQMA 6 continue to show a downward trend and remain compliant with the annual mean objective. However, as only Phase 1 of the scheme has been completed, the full impact on local air quality has not yet been observed. Continued monitoring will be required to assess the long-term effects as the scheme progresses.

Based on recent monitoring data, AQMA 6 meets the general criteria for revocation, with three consecutive years of compliance and concentrations below $36 \mu\text{g}/\text{m}^3$ at relevant exposure. However, given that the A629 scheme is not yet complete, the uncertainty associated with the final traffic and emission outcomes, and historic data capture constraints at this location, **we consider it appropriate to retain AQMA 6 at this time.**

Monitoring will continue throughout 2026, and we will liaise with the LAQM Helpdesk to confirm the appropriate duration of continued monitoring required to support any future revocation decision and to inform the approach to any amendment or removal of this AQMA.

AQMA 7 – Liversedge

Figure D.4 in Appendix D illustrates the geographical extent of AQMA 7 in Liversedge. AQMA 7 was declared in 2017 following exceedances of the annual mean NO_2 objective and the AQMA covers a section of the A638 Wakefield Road at Flush, centred on the junction with Wormald Street. NO_2 monitoring within the AQMA is undertaken using diffusion tubes 48, 179 and 180. Additional monitoring is also carried out at locations outside the AQMA (tubes 139 and 140) to provide a wider spatial assessment of roadside concentrations.

Historically, this AQMA comprised three separate sections. In November 2025, two sections were removed from the AQMA:

- A638 Wakefield Road at Frost Hill, Liversedge, approaching the junction with the A62 Leeds Road (diffusion tube 34)
- Junction of A649 Halifax Road and A62 Leeds Road, Mill Bridge, Liversedge (diffusion tube 33)

Long-term monitoring data from diffusion tube 48 demonstrate a sustained improvement in air quality in recent years. Annual mean NO_2 concentrations reduced from objective exceedances in 2021 and 2022 ($41.2 \mu\text{g}/\text{m}^3$ and $43.0 \mu\text{g}/\text{m}^3$ respectively) to compliant levels in both 2023 and 2024 ($38.0 \mu\text{g}/\text{m}^3$ and $38.2 \mu\text{g}/\text{m}^3$, respectively). Concentrations

reduced further in 2025 to $35.0 \mu\text{g}/\text{m}^3$, representing the lowest concentration recorded at this location since declaration of the AQMA and the first year in which concentrations have fallen below $36 \mu\text{g}/\text{m}^3$ (within 10% of the annual mean objective).

To strengthen the evidence base and improve the robustness of the monitoring dataset, additional diffusion tubes (179 and 180) were installed alongside tube 48 in 2024. In 2025, these locations recorded annual mean concentrations of $33.5 \mu\text{g}/\text{m}^3$ and $31.9 \mu\text{g}/\text{m}^3$ respectively. The results confirm continued compliance with the annual mean objective and provide further evidence of the downward trend in NO_2 concentrations within the AQMA. Monitoring undertaken outside the AQMA at tubes 139 and 140 recorded comparatively low annual mean concentrations of $20.7 \mu\text{g}/\text{m}^3$ and $23.0 \mu\text{g}/\text{m}^3$ respectively.

Monitoring has continued within the sections removed from the AQMA in November 2025 to confirm that compliance is sustained. At the former Frost Hill section (tube 34), concentrations have shown a consistent downward trend over the past five years (from $30.5 \mu\text{g}/\text{m}^3$ in 2021 to $27.2 \mu\text{g}/\text{m}^3$ in 2025), demonstrating continued compliance. Nearby monitoring at tube 137 has also remained low in recent years ($25.4 \mu\text{g}/\text{m}^3$ and $23.5 \mu\text{g}/\text{m}^3$).

Similarly, at the former Mill Bridge section (tube 33), concentrations have remained below the annual mean objective over the past five years (from $31.4 \mu\text{g}/\text{m}^3$ in 2021 to $26.8 \mu\text{g}/\text{m}^3$ in 2025), confirming sustained compliance in this location.

Overall, the monitoring results indicate continued improvement in air quality within AQMA 7, with all monitoring locations compliant with the annual mean NO_2 objective in 2025. Concentrations at all monitoring locations were also below $36 \mu\text{g}/\text{m}^3$ in 2025, including the long-term monitoring location, diffusion tube 48.

However, in accordance with LAQM.TG(22), revocation of an AQMA monitored using diffusion tubes should generally only be considered where annual mean NO_2 concentrations have remained below $36 \mu\text{g}/\text{m}^3$ for three consecutive years. Although diffusion tube 48 has demonstrated compliance with the annual mean objective since 2023, 2025 represents the first year in which concentrations have fallen below $36 \mu\text{g}/\text{m}^3$. **Therefore, AQMA 7 will be retained** pending confirmation of sustained concentrations below $36 \mu\text{g}/\text{m}^3$ over subsequent monitoring years. The expanded monitoring network introduced in 2024 will provide additional supporting evidence for any future revocation assessment.

AQMA 8 - Outlane

Figure D.5 in Appendix D shows this AQMA, which straddles the eastbound and westbound carriageways of the M62 motorway to the west of Huddersfield. The AQMA was declared in 2017 due to exceedances of the annual mean objective for NO_2 . Eleven residential properties are located within the AQMA, with five properties to the north-east of the motorway adjacent to the eastbound carriageway, and six to the south-west adjacent to the westbound carriageway.

Historically, monitoring has been undertaken adjacent to the westbound carriageway (tube 47), which is representative of the nearest residential exposure. Whilst a marginal exceedance was recorded in 2019 ($40.5 \mu\text{g}/\text{m}^3$), concentrations have been below the annual mean objective and below $36 \mu\text{g}/\text{m}^3$ since 2020.

To address the previous lack of monitoring representative of exposure adjacent to the eastbound carriageway, diffusion tube 141 was installed in 2024. In late 2024, additional

diffusion tubes (181 and 182) were co-located with diffusion tube 141 to improve data robustness and confidence in the dataset. This monitoring location is considered representative of exposure for properties adjacent to the eastbound carriageway.

In 2025, all three diffusion tubes (141, 181 and 182) achieved 100% data capture. Bias-adjusted and annualised annual mean NO₂ concentrations were 23.0 µg/m³ at diffusion tube 141, 20.9 µg/m³ at diffusion tube 181, and 23.4 µg/m³ at diffusion tube 182. These results are consistent with 2024 monitoring (23.2 µg/m³ at diffusion tube 141) and demonstrate sustained compliance with the annual mean objective, with concentrations well below 36 µg/m³.

On the basis of the strengthened and representative monitoring evidence from both sides of the motorway, AQMA 8 demonstrates sustained and consistent compliance with the NO₂ annual mean objective, with concentrations comfortably below 36 µg/m³.

In accordance with Defra LAQM guidance, we consider that AQMA 8 meets the criteria for revocation and will seek to revoke this AQMA, subject to consultation with LAQM Helpdesk/Defra. Monitoring will continue as part of the wider network to ensure that compliance is maintained.

AQMA 9 – Huddersfield Town Centre

Figure D.6 in Appendix D details this AQMA, which encompasses Huddersfield town centre within the ring road due to exceedance of the annual mean objective for NO₂. There are 27 diffusion tubes within this AQMA in 2025, located across 19 monitoring sites. These comprise a combination of long-term monitoring locations and additional sites installed in 2024 and 2025. New monitoring locations have been chosen both within the AQMA boundary and in surrounding areas immediately outside the AQMA, to better understand pollutant gradients, improve the representativeness of the monitoring network, and confirm whether exceedances remain contained within the designated AQMA.

Several monitoring sites are located around the junction of Trinity Street, Westgate, and Henry Street, a key route for buses entering and leaving Huddersfield Bus Station. These are tubes 145 (and co-located 183 and 184, outside the Crown Public House), 144, 146, 161, 189 and 191. This area is characterised by a high proportion of bus movements, street canyons (Westgate), gradients, signalised junctions and bus stops, all of which can affect traffic flow and local pollutant dispersion.

In 2025, exceedances of the annual mean NO₂ objective remained confined to Westgate. Tube 183 recorded the highest adjusted annual mean concentrations of 41.0 µg/m³, while the co-located diffusion tube 145 recorded 40.4 µg/m³. Diffusion tube 144, located uphill on the Westgate corridor outside the Jules Verne Public House, recorded an annual mean NO₂ concentration of 39.2 µg/m³ when corrected for distance to nearest relevant exposure. This is below the annual mean objective, although remains within 10% of the objective. It is noted that diffusion tube 144 is near a bus stop, which may contribute to elevated roadside concentrations at this location. Diffusion tube 161, situated downhill on the Westgate corridor, recorded an annual mean NO₂ concentration of 28.5 µg/m³. This is well below the annual mean objective and more than 10% below the objective.

Diffusion tubes 146, outside The Olde Hatte Public House, and 191 are located on the right-turning route into Huddersfield Bus Station. Both recorded annual mean NO₂ concentrations of 35.6 µg/m³, which are below 36 µg/m³ and therefore more than 10% below the annual mean objective. These results indicate compliance with the annual mean

objective at locations associated with bus station ingress. Similarly, north of this junction on Westgate, diffusion tube 189 recorded an annual mean NO₂ concentration of 32.7 µg/m³, which is also more than 10% below the objective.

The highest concentrations in this area continue to be recorded on Westgate and Trinity Street. Diffusion tube 144 is adjacent to a bus stop, and the Crown Public House triplicate site is close to both a bus stop and a signalised junction. However, there are no relevant sensitive receptor locations, such as residential properties, at ground floor level on these roads. Detailed monitoring and source apportionment have been undertaken for this AQMA as part of the Council's AQAP. This work has informed the Council's understanding of local NO₂ dynamics and will continue to support the identification and prioritisation of measures to reduce emissions and concentrations within the AQMA.

Within the eastern section of the AQMA, diffusion tube 28 has recorded an overall reduction over the last five years, from historic exceedances of 41.4 µg/m³ in 2021 and to 32.4 µg/m³ in 2025, which is more than 10% below the annual mean NO₂ objective. Monitoring will continue at this location to confirm whether this improvement is sustained. Elsewhere on Southgate, including diffusion tube 148, concentrations also remain compliant, reducing from 29.9 µg/m³ in 2024, to 26.7 µg/m³ in 2025. This is a welcome reduction, and results from these locations will continue to be reported in future ASRs.

Several additional diffusion tubes were introduced in 2025 to improve confidence in the data within the boundary of AQMA 9 and outside of the AQMA, to better understand local NO₂ concentrations across the Huddersfield town centre road network, particularly in areas influenced by bus movements, signalised junctions, gradients, street canyons and changes in traffic flow. Most of these sites required annualisation, as they were exposed part-way through the year and therefore had limited data capture for 2025. Annual mean NO₂ concentrations at the additional monitoring locations were below 36.0 µg/m³ and therefore more than 10% below the annual mean objective. Monitoring will continue at these locations to provide a more robust dataset and improve understanding of NO₂ dynamics in Huddersfield town centre, particularly in response to development, highway and traffic management schemes. These locations will continue to be reported in future Annual Status Reports.

Whilst exceedances have reduced in extent and are now more spatially confined, they remain present within the AQMA and are associated with the Westgate corridor and routes serving the bus station. **On this basis, AQMA 9 will be retained**, and measures contained within the Council's forthcoming Air Quality Action Plan will continue to focus on reducing emissions in this area.

AQMA 10 – Thornton Lodge

Figure D.7 in Appendix D details this AQMA, which encompasses the A62 Manchester Road at Thornton Lodge, south-west of the signalised junction with the B6432 St Thomas Road. This AQMA was declared in 2019 due to exceedance of the annual mean objective for NO₂.

The AQMA includes approximately 18 residential properties adjacent to the A62 Manchester Road. Monitoring within the AQMA is undertaken at roadside locations (including tubes, 76, 77, 149, 150, 168 and 169), with additional tubes located adjacent to, and just outside, the AQMA boundary (including tubes 50, co-located with 185 and 186, 151 and 152) to provide a broader assessment of concentrations.

In 2024, two monitoring locations were reported to exceed the annual mean NO₂ objective following bias adjustment and distance correction. In 2025, all monitoring locations within the AQMA were below the annual mean objective following adjustment and distance correction. However, monitoring locations (tubes 77, 168 and 169) remained within 10% of the objective. Annual mean concentrations at these locations were 37.1 µg/m³ (34.3 µg/m³ at relevant exposure) at diffusion tube 77, 36.9 µg/m³ (34.2 µg/m³) at tube 168, and 38.2 µg/m³ (35.4 µg/m³) at tube 169. These results indicate that, whilst generally compliant with the air quality objective for NO₂, concentrations remain close to the objective at key roadside locations.

Other monitoring locations within the AQMA recorded lower concentrations, with diffusion tubes 76, 149 and 150 showing a reduction compared to 2024 and recording concentrations of 22.6 µg/m³, 23.2 µg/m³ and 26.8 µg/m³, respectively.

A similar downward trend was observed at monitoring locations outside of the AQMA as observed within the AQMA. Notably, tubes 50 and 152 are now below 36 µg/m³, and whilst tube 151 remains within 10% of the objective at the roadside, concentrations at the nearest façade are 20.5 µg/m³, indicating compliance at relevant exposure.

Overall, the results demonstrate a clear improvement in air quality across AQMA 10, with no exceedances recorded at relevant exposure in 2025. However, concentrations at several monitoring locations remain within 10% of the annual mean objective, indicating that air quality concentration remains influenced by local traffic conditions.

Development has now commenced at land off Blackmoorfoot Road and Felks Street, Crosland Moor. Air quality impacts associated with the scheme were considered at the planning stage. The potential traffic generation associated with this development has also been considered. Whilst the development is located outside the AQMA, the A62 Manchester Road represents a key arterial route into Huddersfield town centre from Crosland Moor and the Colne Valley. On this basis, continued monitoring within AQMA 10 is considered appropriate to ensure that any future impacts associated with increased traffic flows are captured.

Historically, this AQMA also included a section on the A62 Manchester Road, north-east of the signalised junction with Longroyd Lane (tube 49). Annual mean concentrations at this location in 2025 were 27.8 µg/m³, which represents a reduction of 5.9 µg/m³ compared to last year's annual mean concentration of 33.7 µg/m³. This reduction is welcomed and demonstrates sustained compliance in the historic section of the AQMA.

Based on the latest monitoring data, concentrations at relevant exposure have improved and are now compliant with the annual mean NO₂ objective. However, as concentrations at several roadside locations remain within 10% of the objective and given the sensitivity of this location to current and future traffic conditions, **it is considered appropriate to retain AQMA 10** at this time to confirm sustained compliance prior to considering revocation. Monitoring will continue to confirm ongoing improvement, and liaison with Defra and the LAQM Helpdesk will be undertaken to inform the appropriate timing of any future revocation.

Air Quality Management Areas Position Summary

The status for each AQMA declared for exceedance of the annual mean NO₂ objective is summarised below:

- **AQMA 3: AQMA 3 is to be retained.** Monitoring has demonstrated continued compliance within the remaining Halifax Road section in 2025 (first year below 36 $\mu\text{g}/\text{m}^3$ at key locations); however, continued monitoring is required to confirm sustained compliance prior to considering full revocation.
- **AQMA 5: AQMA 5 is to be retained** and actions for the AQMA are included in the updated AQAP. All monitoring locations were compliant at relevant exposure in 2025 (first year of full compliance); however, concentrations at some tubes remain within 10% of the objective, and sustained compliance (three years below 36 $\mu\text{g}/\text{m}^3$) has not yet been demonstrated. Continued monitoring is therefore required before revocation can be considered.
- **AQMA 6: AQMA 6 is to be retained** and actions for the AQMA are included in the updated AQAP. Concentrations at relevant exposure have remained compliant and below 36 $\mu\text{g}/\text{m}^3$ for three consecutive years, meeting the general criteria for revocation; however, due to uncertainty associated with the ongoing A629 scheme, continued monitoring is required before revocation can be considered
- **AQMA 7: AQMA 7 is to be retained.** Monitoring locations within the AQMA were compliant and below 36 $\mu\text{g}/\text{m}^3$ in 2025, with a clear downward trend observed. However, as 2025 represents the first year in which concentrations at the long-term site have fallen below 36 $\mu\text{g}/\text{m}^3$, continued monitoring is required to confirm sustained compliance prior to considering full revocation.
- **AQMA 8: AQMA 8 is to be revoked**, as monitoring demonstrates sustained compliance with the annual mean NO_2 objective, with concentrations consistently well below 36 $\mu\text{g}/\text{m}^3$ at relevant exposure. Revocation will be progressed in consultation with Defra and the LAQM Helpdesk. Monitoring will continue as part of the wider network.
- **AQMA 9: AQMA 9 is to be retained.** There were exceedances of the annual mean NO_2 objective at 2 monitoring sites in 2025, when distance corrected. These exceedances are localised with the Westgate Corridor. Actions for this AQMA will be included in the upcoming AQAP. Monitoring will continue within this AQMA.
- **AQMA 10: AQMA 10 is to be retained** and actions for the AQMA are included in the updated AQAP. Monitoring in 2025 indicates that all locations are compliant at relevant exposure (first year of full compliance); however, several roadside locations remain within 10% of the objective and the area remains sensitive to traffic conditions and future development. Continued monitoring is therefore required to confirm sustained compliance prior to considering revocation.

3.2.2 Particulate Matter (PM_{10})

Table A.6 presents the ratified and adjusted PM_{10} annual mean concentrations over the past five years compared with the air quality objective of 40 $\mu\text{g}/\text{m}^3$. Concentrations at CM1 have remained compliant and relatively stable over the last four years of monitoring. In 2025, the annual mean PM_{10} concentration increased slightly from 12.5 $\mu\text{g}/\text{m}^3$ in 2024 to 14.2 $\mu\text{g}/\text{m}^3$.

Table A.7 in Appendix A shows the ratified continuous PM_{10} daily mean concentrations over the same period, compared with the 24-hour objective of 50 $\mu\text{g}/\text{m}^3$ (not to be exceeded more than 35 times per year). In 2025, there were four exceedances of this objective, compared with one exceedance recorded in 2024.

AQMA 2 – Ravensthorpe/Scouthill

As referenced in section 2.1, the A644 Huddersfield Road in Scouthill was declared an AQMA in 2009 due to exceedance of the PM₁₀ 24-hour mean objective. As outlined in the 2025 ASR, following consultation with the LAQM Helpdesk and Defra, Kirklees Council progressed with the revocation of this AQMA.

The AQMA has now been formally revoked. In accordance with Defra LAQM guidance (FAQ 142), this area has not been included in the Council's Air Quality Action Plan. We will continue to keep air quality in the area under review through its ongoing monitoring and reporting processes.

NO₂ concentrations within the former AQMA continue to be monitored using diffusion tubes. The locations of these tubes are shown in Figure D.11 in Appendix D, and the results are discussed earlier in this report within section 2.1.

3.2.3 Particulate Matter (PM_{2.5})

Table A.8 in Appendix A presents the ratified and adjusted monitored PM_{2.5} annual mean concentrations for the past five years. Concentrations have remained relatively stable at CM1 in the last three years that PM_{2.5} has been measured. In 2025, the annual mean PM_{2.5} concentration increased slightly from 8.0 µg/m³ in 2024 to 8.8 µg/m³ in 2025.

3.2.4 Sulphur Dioxide (SO₂)

We do not monitor SO₂ in Kirklees.

Appendix A: Monitoring results

Table A.1 – Details of automatic monitoring site

Site ID	Site name	Site type	X OS grid ref (easting)	Y OS grid ref (northing)	Pollutants monitored	In AQMA? Which AQMA?	Monitoring technique	Distance to relevant exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Inlet height (m)
CM1	Dewsbury Ashworth Grange	Urban background	424060	421912	NO ₂ , PM ₁₀ , PM _{2.5} , O ₃	No	Chemiluminescent, FIDAS, UV absorption	13	0	2

Notes:

(1) N/A if not applicable

(2) 0m if the monitoring site is at a location of exposure (e.g. installed on the façade of a residential property).

Table A.2 – 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)
3	Near 141 Blacker Road, Junction of Blacker/Edgerton Road - Triplicate 1	Roadside	413504	417439	NO ₂	AQMA 6	2.0	2.4	No	2.0
5	Near 603 Huddersfield Road, Ravensthorpe	Roadside	422442	420380	NO ₂	No	1.7	1.6	No	2.6
6	Near 2 Leeds Road, Mirfield	Roadside	417878	421054	NO ₂	No	7.6	4.0	No	2.0
20	Near Eastborough Academy, Rockley Street, Dewsbury	Kerbside	424858	421904	NO ₂	AQMA 5	12.0	2.0	No	2.0
21	Castlegate (Ringroad), Huddersfield	Roadside	414149	416686	NO ₂	AQMA 9	6.9	2.1	No	2.0

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)
22	Outside 1257 Leeds Road, Bradley - Triplicate 1	Urban Background	417394	420458	NO ₂	No	3.8	1.3	No	2.6
23	Outside 604 Huddersfield Road, Ravensthorpe.	Other	422300	420337	NO ₂	No	0.7	2.1	No	2.7
25	Near 1211. Leeds Road, Bradley, Huddersfield	Roadside	417255	420360	NO ₂	No	1.5	7.0	No	1.8
28	Near Stewart House, Southgate (Ring Road), Huddersfield	Roadside	414752	416698	NO ₂	AQMA 9	0.1	3.1	No	2.0
30	Near 2 Ravensfield Road, located on Huddersfield Road,	Roadside	423154	420658	NO ₂	No	0.0	2.1	No	2.8

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)
Scouthill - Triplicate 1										
31	Near 10 Edgerton Road, Edgerton	Roadside	413400	417495	NO ₂	No	8.3	2.7	No	2.0
32	Near 131 Blacker Road, Edgerton	Roadside	413513	417481	NO ₂	No	5.0	2.6	No	2.0
33	Near 5 Huddersfield Road, junction with Wakefield Road.	Roadside	420728	423669	NO ₂	AQMA 7	4.3	2.4	No	2.0
34	Outside 471 Wakefield Road, Liversedge	Roadside	420845	423770	NO ₂	AQMA 7	0.3	1.9	No	2.0
35	Outside 45 Leeds Road, Liversedge	Other	420827	423844	NO ₂	No	9.4	1.9	No	2.0

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)
40	Outside 35 Leeds Road, Eastborough, Dewsbury - Triplicate 1	Roadside	424922	421973	NO ₂	AQMA 5	1.2	1.6	No	2.0
42	Outside 39 Leeds Road, Eastborough, Dewsbury	Roadside	424969	422002	NO ₂	No	5.6	1.9	No	2.0
43	Junction of John Street/Leeds Road, Eastborough, Dewsbury	Roadside	425093	422024	NO ₂	No	6.0	1.9	No	2.0
44	Near The Crown PH, Caulms Wood Road, Eastborough	Roadside	425179	422116	NO ₂	No	0.0	1.0	No	2.0
47	Near 1 Round Ings Road, Outlane	Other	407942	417261	NO ₂	AQMA 8	0.0	14.4	No	2.0

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)
48	Near 404 Wakefield Road, Liversedge - Triplicate 1	Roadside	421044	423671	NO ₂	AQMA 7	0.0	2.6	No	2.0
49	Near 152 Manchester Road, Thornton Lodge 2	Roadside	413659	416182	NO ₂	No	3.5	3.7	No	2.0
50	Near 191 Manchester Road, Thornton Lodge 1 – Triplicate 1	Roadside	413432.8	415989	NO ₂	No	1.6	2.5	No	2.0
55	Outside Oxfam, Huddersfield Road, Holmfirth	Roadside	414185	408260	NO ₂	No	3.2	1.7	No	2.0
56	New Wharf Inn PH,	Roadside	415009	416420	NO ₂	AQMA 9	0.8	2.8	No	2.0

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)
	Wakefield Road, Aspley									
60	Town Gate Holmfirth by bikeshed.	Roadside	414269	408218	NO ₂	No	12.9	1.6	No	2.0
75	Near 17 Blackmoorfoot Road, Thornton Lodge	Roadside	413153	415894	NO ₂	No	2.7	1.5	No	2.0
76	Near 258 Manchester Road, Thornton Lodge 3	Roadside	413198	415957	NO ₂	AQMA 10	5.0	1.3	No	2.0
77	Near 202 Manchester Road, Thornton Lodge 4 – Triplicate 1	Roadside	413455	416013	NO ₂	AQMA 10	1.2	2.2	No	2.0

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)
82	Near 1282 Leeds Road, Bradley	Roadside	417508	420570	NO ₂	No	6.2	1.5	No	2.0
95	Near 5 Hollowgate, Holmfirth	Roadside	414170	408118	NO ₂	No	0.0	1.0	No	2.0
96	Traffic lights, Victoria Street, Holmfirth	Kerbside	414169	408192	NO ₂	No	1.6	0.7	No	2.6
98	Near 33 Huddersfield Road, Holmfirth	Roadside	414092	408133	NO ₂	No	0.8	2.3	No	2.0
105	Near 28 Commercial St/Well Lane, Batley	Roadside	424513	424139	NO ₂	No	22.4	2.5	No	2.0
106	Near 28 Commercial Street/Wards Hill junction, Batley	Roadside	424425	424171	NO ₂	No	42.5	2.2	No	2.0

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)
107	Junction at zebra crossing near Commercial Street/Market Place/Branch Road, Batley	Roadside	424259	424289	NO ₂	No	6.9	1.4	No	2.0
133	Outside 222 Halifax Road, Birchencliffe.	Roadside	411689	419100	NO ₂	AQMA 3	7.0	2.0	No	2.0
134	Near 214 Halifax Road, Birchencliffe - Triplicate 1	Roadside	411717	419060	NO ₂	AQMA 3	4.3	2.1	No	2.0
135	Near 141 Blacker Rd, Edgerton.	Roadside	413496	417449	NO ₂	AQMA 6	5.8	4.1	No	2.0
136	Near 1 Edgerton Road, Edgerton	Roadside	413527	417416	NO ₂	No	5.8	2.7	No	2.0

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)
137	Near 15 Frost Hill, Millbridge, Liversedge.	Roadside	420871	423748	NO ₂	No	4.8	2.0	No	2.0
138	Near Frost Hill at South St, Liversedge	Other	420926	423723	NO ₂	No	4.0	2.7	No	2.0
139	Junction of Wormald St and Wakefield road, Liversedge.	Roadside	421087	423659	NO ₂	No	4.7	2.0	No	2.0
140	Near 517 Wakefield Road, Liversedge	Roadside	421122	423662	NO ₂	No	0.0	3.2	No	2.0
141	Fence at Round Ings Road, Outlane - Triplicate 1	Roadside	407912	417316	NO ₂	No	21.6	4.5	No	1.0
142	Near 20 Chapel Hill Huddersfield	Roadside	414321	416174	NO ₂	AQMA 9	5.9	1.8	No	2.0

Diffusi on tube ID	Site name	Site type	X OS grid ref (easting)	Y OS grid ref (northin g)	Pollutan ts monitor ed	In AQMA ? Which AQMA ?	Distance to relevant exposure (m) (¹)	Distan ce to kerb of nearest road (m) (²)	Tube co- located with a continuo us analyser ?	Tube height (m)
143	Outside 33 Queensgate junction of Zetland Street, Huddersfield - Triplicate 1	Roadside	414718	416451	NO ₂	AQMA 9	3.9	2.0	No	2.0
144	Outside the Jules Verne PH, Westgate	Roadside	414403	416735	NO ₂	AQMA 9	1.4	3.7	No	2.0
145	Outside The Crown PH, Westgate - Triplicate 1	Roadside	414266	416736	NO ₂	AQMA 9	2.1	3.2	No	2.0
146	Outside The Olde Hatte PH, Trinity Street	Roadside	414222	416731	NO ₂	AQMA 9	0.0	4.0	No	2.0
148	Outside 5 Southgate, Huddersfield - Triplicate 1	Roadside	414689	416866	NO ₂	AQMA 9	2.0	2.4	No	2.0
149	Manchester Road above	Roadside	413238	415952	NO ₂	AQMA 10	18.7	3.7	No	2.0

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)
	Birkhouse Lane, Thornton Lodge									
150	Outside 242 Manchester Road, Thornton Lodge	Roadside	413286	415959	NO ₂	AQMA 10	6.3	2.6	No	2.0
151	Near 173 Manchester Road, Thornton Lodge	Roadside	413520	416030	NO ₂	No	33.1	2.3	No	2.0
152	Near 5 Blackmoorfoot Rd, Crosland Moor	Roadside	413223	415920	NO ₂	No	0.0	2.5	No	2.0
153	Outside 189 Blackmoorfoot Road, Crosland Moor - Triplicate 1	Roadside	412750	415719	NO ₂	No	3.5	1.7	No	2.0

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)
157	Outside 2 Calder Rd, junctions with Huddersfield Road, Ravensthorpe - Triplicate 1	Roadside	422461	420381	NO ₂	No	0.9	4.0	No	2.0
159	Near 227 Lockwood Pharmacy, Lockwood Road, Lockwood	Roadside	413659	415215	NO ₂	No	0.0	3.7	No	2.0
160	Near 21, 23 Leeds Rd, Heckmondwike, Liversedge	Roadside	420775	423783	NO ₂	No	2.1	2.5	No	2.0
161	Outside 22 Westgate, Junction of Westgate and Station street, Huddersfield	Roadside	414400	416753	NO ₂	AQMA 9	0.0	4.0	No	2.0

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)
162	Near 15 Yew Green Road, Lockwood - Triplicate 1	Roadside	413192	415378	NO ₂	No	0.0	1.6	No	2.0
164	Outside 35 Leeds Road, Eastborough, Dewsbury - Triplicate 2	Roadside	424922	421973	NO ₂	AQMA 5	1.2	1.6	No	2.0
165	Outside 35 Leeds Road, Eastborough, Dewsbury - Triplicate 3	Roadside	424922	421973	NO ₂	AQMA 5	1.2	1.6	No	2.0
166	Outside 5 Southgate, Huddersfield - Triplicate 2	Roadside	414689	416866	NO ₂	AQMA 9	2.0	2.4	No	2.0
167	Outside 5 Southgate, Huddersfield - Triplicate 3	Roadside	414689	416866	NO ₂	AQMA 9	2.0	2.4	No	2.0

Diffusi on tube ID	Site name	Site type	X OS grid ref (easting)	Y OS grid ref (northin g)	Pollutan ts monitor ed	In AQMA ? Which AQMA ?	Distance to relevant exposure (m) ⁽¹⁾	Distan ce to kerb of nearest road (m) ⁽²⁾	Tube co- located with a continuo us analyser ?	Tube height (m)
168	Near 202 Manchester Road, Thornton Lodge 4 - Triplicate 2	Roadside	413455	416013	NO ₂	AQMA 10	1.2	2.2	No	2.0
169	Near 202 Manchester Road, Thornton Lodge 4 - Triplicate 3	Roadside	413455	416013	NO ₂	AQMA 10	1.2	2.2	No	2.0
170	Outside 2 Bankfield Road, Huddersfield	Roadside	414073	416180	NO ₂	No	4.0	3.9	No	2.8
171	Near 18 Edgerton Grove Rd, Huddersfield	Roadside	413439	417401	NO ₂	No	15.2	2.1	No	2.0
172	Junction of Edgerton Rd and Edgerton	Roadside	413467	417441	NO ₂	No	9.2	3.1	No	2.0

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)
	Grove Rd, Huddersfield.									
173	Near 2 Ravensfield Road, located on Huddersfield Road, Scouthill - Triplicate 2	Roadside	423154	420658	NO ₂	No	0.0	2.1	No	2.8
174	Near 2 Ravensfield Road, located on Huddersfield Road, Scouthill - Triplicate 3	Roadside	423154	420658	NO ₂	No	0.0	2.1	No	2.8
175	Outside 2 Calder Rd, junctions with Huddersfield Road,	Roadside	422461	420381	NO ₂	No	0.9	4.0	No	2.0

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)
	Ravensthorpe - Triplicate 2									
176	Outside 2 Calder Rd, junctions with Huddersfield Road, Ravensthorpe - Triplicate 3	Roadside	422461	420381	NO ₂	No	0.9	4.0	No	2.0
177	Near 214 Halifax Road, Birchencliffe - Triplicate 2	Roadside	411717	419060	NO ₂	AQMA 3	1.7	2.1	No	2.0
178	Near 214 Halifax Road, Birchencliffe - Triplicate 3	Roadside	411717	419060	NO ₂	AQMA 3	1.7	2.1	No	2.0
179	Near 404 Wakefield Road, Liversedge - Triplicate 2	Roadside	421044	423670	NO ₂	AQMA 7	0.0	2.6	No	2.0

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)
180	Near 404 Wakefield Road, Liversedge - Triplicate 3	Roadside	421044	423670	NO ₂	AQMA 7	0.0	2.6	No	2.0
181	Fence at Round Ings Road, Outlane - Triplicate 2	Roadside	407912	417316	NO ₂	No	21.6	4.5	No	1.0
182	Fence at Round Ings Road, Outlane - Triplicate 3	Roadside	407912	417316	NO ₂	No	21.6	4.5	No	1.0
183	Outside The Crown PH, Westgate - Triplicate 2	Roadside	414266	416736	NO ₂	AQMA 9	2.1	3.2	No	2.0
184	Outside The Crown PH, Westgate - Triplicate 3	Roadside	414266	416736	NO ₂	AQMA 9	2.1	3.2	No	2.0
185	Near 191 Manchester	Roadside	413433	415989	NO ₂	No	1.6	2.5	No	2.0

Diffusi on tube ID	Site name	Site type	X OS grid ref (easting)	Y OS grid ref (northin g)	Pollutan ts monitor ed	In AQMA ? Which AQMA ?	Distance to relevant exposure (m) (¹)	Distan ce to kerb of nearest road (m) (²)	Tube co- located with a continuo us analyser ?	Tube height (m)
	Road, Thornton Lodge 1 – Triplicate 2									
186	Near 191 Manchester Road, Thornton Lodge 1 – Triplicate 3	Roadside	413433	415989	NO ₂	No	1.6	2.5	No	2.0
187	Near 141 Blacker Road, Junction of Blacker/Edgert on Road - Triplicate 2	Roadside	413504	417439	NO ₂	AQMA 6	2.0	2.4	No	2.0
188	Near 141 Blacker Road, Junction of Blacker/Edgert on Road - Triplicate 3	Roadside	413504	417439	NO ₂	AQMA 6	2.0	2.4	No	2.0
189	New North Parade at	Roadside	414247	416775	NO ₂	AQMA 9	20.2	4.8	No	2.0

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)
	Railway Bridge, Huddersfield									
190	Outside 3 Britannic House, Upperhead Row, Huddersfield	Roadside	414248	416702	NO ₂	AQMA 9	1.8	5.0	No	2.0
191	Outside 6 Henry Street, Butty Bar, Huddersfield	Roadside	414216	416708	NO ₂	AQMA 9	1.5	5.0	No	2.0
192	John William Street outside McDonalds, Huddersfield	Roadside	414486	416745	NO ₂	AQMA 9	4.1	4.6	No	2.0
193	Outside 28 Kirkgate, Huddersfield	Roadside	414619	416745	NO ₂	AQMA 9	1.5	2.5	No	2.0
194	Outside 1257 Leeds Road,	Roadside	417394	420458	NO ₂	No	3.8	1.3	No	2.6

Diffusi on tube ID	Site name	Site type	X OS grid ref (easting)	Y OS grid ref (northin g)	Pollutan ts monitor ed	In AQMA ? Which AQMA ?	Distance to relevant exposure (m) ⁽¹⁾	Distan ce to kerb of nearest road (m) ⁽²⁾	Tube co- located with a continuo us analyser ?	Tube height (m)
	Bradley - Triplicate 2									
195	Outside 1257 Leeds Road, Bradley - Triplicate 3	Roadside	417394	420458	NO ₂	No	3.8	1.3	No	2.6
197	Outside 556 Leeds Road, Huddersfield	Roadside	416264	418528	NO ₂	No	4.0	2.4	No	2.0
198	Outside 518 Leeds Road, Huddersfield	Roadside	416096	418408	NO ₂	No	3.5	1.8	No	2.5
199	Outside 355 Leeds Road, Huddersfield	Roadside	415339	417962	NO ₂	No	3.1	3.0	No	2.5
200	Outside Starbucks, Leeds Road, Huddersfield	Roadside	415329	417927	NO ₂	No	21*	2.5	No	2.0
201	Outside Galloway House (241)	Roadside	415032	417747	NO ₂	No	14*	1.5	No	2.0

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)
	Leeds Road, Huddersfield									
202	Near Daphne Steele building, Huddersfield University - Triplicate 1	Roadside	414722	417014	NO ₂	AQMA 9	43.5	3.6	No	2.0
203	Near 15 Yew Green Road, Lockwood - Triplicate 2	Roadside	413192	415378	NO ₂	No	0.0	1.6	No	2.0
204	Near 15 Yew Green Road, Lockwood - Triplicate 3	Roadside	413192	415378	NO ₂	No	0.0	1.6	No	2.0
205	Outside 189 Blackmoorfoot Road, Crosland Moor - Triplicate 2	Roadside	412750	415719	NO ₂	No	3.5	1.7	No	2.0
206	Outside 189 Blackmoorfoot	Roadside	412750	415719	NO ₂	No	3.5	1.7	No	2.0

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)
	Road, Crosland Moor - Triplicate 3									
207	Outside 336 Blackmoorfoot Road, Crosland Moor, Huddersfield	Kerbside	411841	414743	NO ₂	No	32.4	0.6	No	2.0
208	Near 75 Nabcroft Lane, Crosland Moor, Huddersfield	Kerbside	412800	415430	NO ₂	No	8.9	0.9	No	2.0
209	Park Road, Crosland Moor, Huddersfield LC27 (adj 29 Park Road)	Roadside	412943	415572	NO ₂	No	6.7	1.6	No	2.0
210	Outside 80 Nabcroft Lane, Crosland	Roadside	412981	415364	NO ₂	No	3.2	1.1	No	2.0

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)
	Moor, Huddersfield									
211	Outside 33 Queensgate junction of Zetland Street, Huddersfield - Triplicate 2	Roadside	414718	416451	NO ₂	AQMA 9	3.9	2.0	No	2.0
212	Outside 33 Queensgate junction of Zetland Street, Huddersfield - Triplicate 3	Roadside	414718	416451	NO ₂	AQMA 9	3.9	2.0	No	2.0
213	Near Daphne Steele building, Huddersfield University - Triplicate 2	Roadside	414722	417014	NO ₂	AQMA 9	43.5	3.6	No	2.0
214	Near Daphne Steele building, Huddersfield	Roadside	414722	417014	NO ₂	AQMA 9	43.5	3.6	No	2.0

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)
	University - Triplicate 3									
215	Opposite 125 Trinity Street, Huddersfield	Roadside	413859	416910	NO ₂	No	1.6	1.7	No	2.0
216	Near 41 Trinity Street, Huddersfield.	Roadside	414041	416754	NO ₂	No	8.7	2.6	No	2.0
217	Adjacent 112 Fitzwilliam Street, New North Road, Huddersfield	Roadside	414017	417003	NO ₂	No	3.7	2.5	No	2.0
218	Outside St Patricks Church, New North Road, Huddersfield	Roadside	414101	416943	NO ₂	AQMA 9	26.8	1.4	No	2.0
219	Outside 32 Lower Fitzwilliam Street, Huddersfield	Roadside	414675	417213	NO ₂	No	0.4	2.0	No	2.0

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)
220	Market Street, Huddersfield	Roadside	414280	416523	NO ₂	AQMA 9	15.2	4.8	No	2.0
221	Near Oasis Youth and Community Centre, Merton Street, Springwood, Huddersfield	Roadside	414073	416455	NO ₂	No	52.3	2.3	No	2.0
222	Outside Sportsman Inn, 1 St John's Road, Huddersfield	Roadside	414366	417124	NO ₂	AQMA 9	1.5	1.3	No	2.0
223	Near 23b St John's Road, Huddersfield	Roadside	414345	417334	NO ₂	No	24.4	2.0	No	2.0
224	Next to pedestrian crossing - Crossroads at Bradford	Kerbside	414518	417777	NO ₂	No	15.3	1.2	No	2.0

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)
	Road/Willow Lane East									
225	300A Bradford Road, Fartown, Huddersfield	Roadside	414599	418344	NO ₂	No	6.0	2.5	No	2.0
226	2 Swan Lane, Lockwood, Huddersfield	Roadside	413592	415227	NO ₂	No	15.4	2.7	No	2.0
227	38 Meltham Road, Lockwood, Huddersfield	Roadside	413554	415124	NO ₂	No	4.7	1.5	No	2.0

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.

In 2025, there are 124 diffusion tubes (92 sites) with valid data capture for 2025, 65 of these tubes are new additions for the monitoring period 2025.

Table A.3 – Annual mean NO₂ monitoring results: automatic monitoring (µg/m³)

Site ID	X OS grid ref (easting)	Y OS grid ref (northing)	Site type	Valid data capture for monitoring period (%) ⁽¹⁾	Valid data capture 2025 (%) ⁽²⁾	2021	2022	2023	2024	2025
CM1	424060	421912	Urban background	89.4%	89.4%	17.1	17.8	16.0	15.4	16.6

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

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

☐ Where exceedances of the NO₂ annual mean objective occur at locations not representative of relevant exposure, the fall-off with distance concentration has been calculated and reported concentration provided in brackets for 2025.

Notes:

The annual mean concentrations are presented as µg/m³.

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

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%).

Table A.4 – 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
3	413504	417439	Roadside	90.7	90.7	40.3	41.5	37.2	36.4	30.6
5	422442	420380	Roadside	92.3	92.3			30.3	33.2	30.0
6	417878	421054	Roadside	98.4	98.4		36.8	34.6	35.6	35.5
20	424858	421904	Kerbside	55.8	55.8	33.1	32.3	28.6	26.8	28.5
21	414149	416686	Roadside	88.7	88.7	39.3	37.8	35.7	38.4	35.0
22	417394	420458	Urban Background	92.3	92.3			28.7	31.2	29.4
23	422300	420337	Other	81.0	81.0			32.5	33.8	32.4
25	417255	420360	Roadside	90.7	90.7	24.5	23.8	21.0	23.1	21.3
28	414752	416699	Roadside	79.1	79.1	41.4	41.0	38.1	38.1	32.4
30	423154	420658	Roadside	98.4	98.4			38.2	39.9	32.9
31	413400	417495	Roadside	98.4	98.4	25.0	24.6	21.6	21.8	20.5
32	413513	417481	Roadside	98.4	98.4	36.1	38.1	35.2	37.9	31.5
33	420728	423669	Roadside	98.4	98.4	31.4	30.2	27.7	29.3	26.8
34	420845	423770	Roadside	98.4	98.4	30.5	33.6	30.3	33.1	27.2
35	420827	423844	Other	73.4	73.4	44.3	44.7	38.8	38.2	32.5

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
40	424922	421973	Roadside	98.4	98.4	50.2	47.5	43.0	41.6	38.7
42	424969	422002	Roadside	92.3	92.3	37.9	33.7	30.3	32.5	28.2
43	425093	422024	Roadside	98.4	98.4	39.0	36.3	31.5	32.8	29.1
44	425179	422116	Roadside	90.7	90.7	30.1	31.0	27.7	28.8	24.7
47	407942	417261	Other	98.4	98.4	34.4	32.8	30.2	33.0	27.8
48	421044	423670	Roadside	88.7	88.7	41.2	43.0	38.0	38.2	35.0
49	413659	416182	Roadside	98.4	98.4	36.4	33.6	32.4	33.7	27.8
50	413433	415989	Roadside	98.4	98.4	39.8	40.6	37.4	37.0	35.2
55	414185	408260	Roadside	83.0	83.0	25.2	25.7	23.2	27.5	24.0
56	415009	416420	Roadside	98.4	98.4	37.4	36.1	34.8	48.6	29.5
60	414269	408218	Roadside	88.7	88.7				20.0	20.0
75	413153	415894	Roadside	98.4	98.4	28.9	27.1	26.1	24.6	25.5
76	413198	415957	Roadside	98.4	98.4	28.9	27.1	25.9	26.6	22.6
77	413455	416013	Roadside	98.4	98.4	42.6	41.9	38.2	42.1	37.1
82	417508	420570	Roadside	81.0	81.0				34.0	31.6
95	414170	408118	Roadside	73.4	73.4	24.0	22.6	20.6	21.8	19.6
96	414169	408192	Kerbside	82.7	82.7			27.7	32.0	23.9

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
98	414092	408133	Roadside	98.4	98.4	22.2	21.3	21.3	22.9	21.6
105	424513	424139	Roadside	75.0	75.0				22.6	20.0
106	424425	424171	Roadside	88.7	88.7				21.2	21.8
107	424259	424289	Roadside	98.4	98.4				28.6	26.6
133	411689	419100	Roadside	98.4	98.4				38.0	33.9
134	411717	419060	Roadside	98.4	98.4				28.9	23.6
135	413496	417449	Roadside	76.9	76.9				35.8	32.3
136	413527	417416	Roadside	98.4	98.4				30.0	28.8
137	420871	423748	Roadside	98.4	98.4				25.4	23.5
138	420926	423728	Other	98.4	98.4				25.1	24.1
139	421087	423659	Roadside	90.7	90.7				24.6	20.7
140	421122	423662	Roadside	98.4	98.4				22.5	23.0
141	407912	417316	Roadside	98.4	98.4				23.2	23.0
142	414321	416174	Roadside	90.7	90.7				34.6	34.5
143	414718	416451	Roadside	71.4	71.4				28.9	29.0
144	414403	416735	Roadside	75.0	75.0				53.1	41.5
145	414266	416736	Roadside	98.4	98.4				52.0	44.3

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 2025 (%) ⁽²⁾	2021	2022	2023	2024	2025
146	414222	416731	Roadside	90.7	90.7				37.9	35.6
148	414689	416866	Roadside	88.7	88.7				29.9	26.7
149	413238	415952	Roadside	81.0	81.0				25.2	23.2
150	413286	415959	Roadside	90.7	90.7				30.6	26.8
151	413520	416030	Roadside	98.4	98.4				44.8	38.9
152	413223	415920	Roadside	79.1	79.1				32.0	29.3
153	412750	415719	Roadside	98.4	98.4				32.9	27.1
157	422461	420381	Roadside	98.4	98.4				34.7	32.2
159	413659	415215	Roadside	98.4	98.4				29.9	24.9
160	420775	423783	Roadside	23.1	23.1				30.4	28.8
161	414400	416753	Roadside	88.7	88.7				32.0	28.5
162	413192	415378	Roadside	98.4	98.4					27.1
164	424922	421973	Roadside	98.4	98.4					38.9
165	424922	421973	Roadside	98.4	98.4					39.3
166	414689	416866	Roadside	81.0	81.0					27.5
167	414689	416866	Roadside	98.4	98.4					27.0
168	413455	416013	Roadside	98.4	98.4					36.9

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
169	413455	416013	Roadside	98.4	98.4					38.2
170	414073	416180	Roadside	98.4	98.4					26.3
171	413439	417401	Roadside	15.4	15.4					22.8
172	413467	417441	Roadside	90.7	90.7					27.4
173	423154	420658	Roadside	98.4	98.4					33.4
174	423154	420658	Roadside	90.7	90.7					34.4
175	422461	420381	Roadside	98.4	98.4					32.6
176	422461	420381	Roadside	98.4	98.4					32.0
177	411717	419060	Roadside	98.4	98.4					23.4
178	411717	419060	Roadside	79.1	79.1					24.9
179	421044	423670	Roadside	98.4	98.4					33.5
180	421044	423670	Roadside	98.4	98.4					31.9
181	407912	417316	Roadside	98.4	98.4					20.9
182	407912	417316	Roadside	98.4	98.4					23.4
183	414266	416736	Roadside	98.4	98.4					44.9
184	414266	416736	Roadside	98.4	98.4					41.9
185	413433	415989	Roadside	90.7	90.7					34.6

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
186	413433	415989	Roadside	98.4	98.4					35.8
187	413504	417439	Roadside	98.4	98.4					32.5
188	413504	417439	Roadside	88.7	88.7					31.4
189	414247	416775	Roadside	98.4	98.4					32.7
190	414248	416702	Roadside	98.4	98.4					31.3
191	414216	416708	Roadside	98.4	98.4					35.6
192	414486	416745	Roadside	98.4	98.4					30.2
193	414619	416745	Roadside	90.7	90.7					28.1
194	417394	420458	Roadside	92.3	92.3					29.8
195	417394	420458	Roadside	100.0	84.6					29.6
197	416264	418528	Roadside	100.0	84.6					23.4
198	416096	418408	Roadside	100.0	84.6					29.0
199	415339	417962	Roadside	100.0	84.6					37.3
200	415329	417927	Roadside	100.0	84.6					26.8
201	415032	417747	Roadside	100.0	84.6					27.4
202	414722	417014	Roadside	100.0	84.6					23.3
203	413192	415378	Roadside	87.5	59.6					30.6

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
204	413192	415378	Roadside	87.5	61.5					30.5
205	412750	415719	Roadside	100.0	69.2					32.1
206	412750	415719	Roadside	87.5	61.5					32.2
207	411841	414743	Kerbside	100.0	69.2					16.6
208	412800	415430	Kerbside	100.0	69.2					13.8
209	412943	415572	Roadside	75.0	51.9					23.5
210	412981	415364	Roadside	100.0	69.2					16.4
211	414718	416451	Roadside	62.5	42.3					35.9
212	414718	416451	Roadside	87.5	59.6					32.2
213	414722	417014	Roadside	87.5	61.5					23.8
214	414722	417014	Roadside	100.0	69.2					25.8
215	413859	416910	Roadside	100.0	69.2					27.5
216	414041	416754	Roadside	100.0	69.2					31.4
217	414017	417003	Roadside	100.0	69.2					26.8
218	414101	416943	Roadside	100.0	69.2					26.6
219	414675	417213	Roadside	100.0	69.2					25.0
220	414280	416523	Roadside	100.0	69.2					28.0

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
221	414073	416455	Roadside	87.5	59.6					27.6
222	414366	417124	Roadside	87.5	61.5					31.9
223	414345	417334	Roadside	87.5	61.5					26.9
224	414518	417777	Kerbside	100.0	69.2					29.6
225	414599	418344	Roadside	100.0	69.2					28.3
226	413592	415227	Roadside	83.3	42.3					30.5
227	413554	415124	Roadside	100.0	51.9					26.2

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

☒ 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 $\mu\text{g}/\text{m}^3$.

Exceedances of the NO₂ annual mean objective of 40 $\mu\text{g}/\text{m}^3$ are shown in **bold**.

NO₂ annual means exceeding 60 $\mu\text{g}/\text{m}^3$, 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

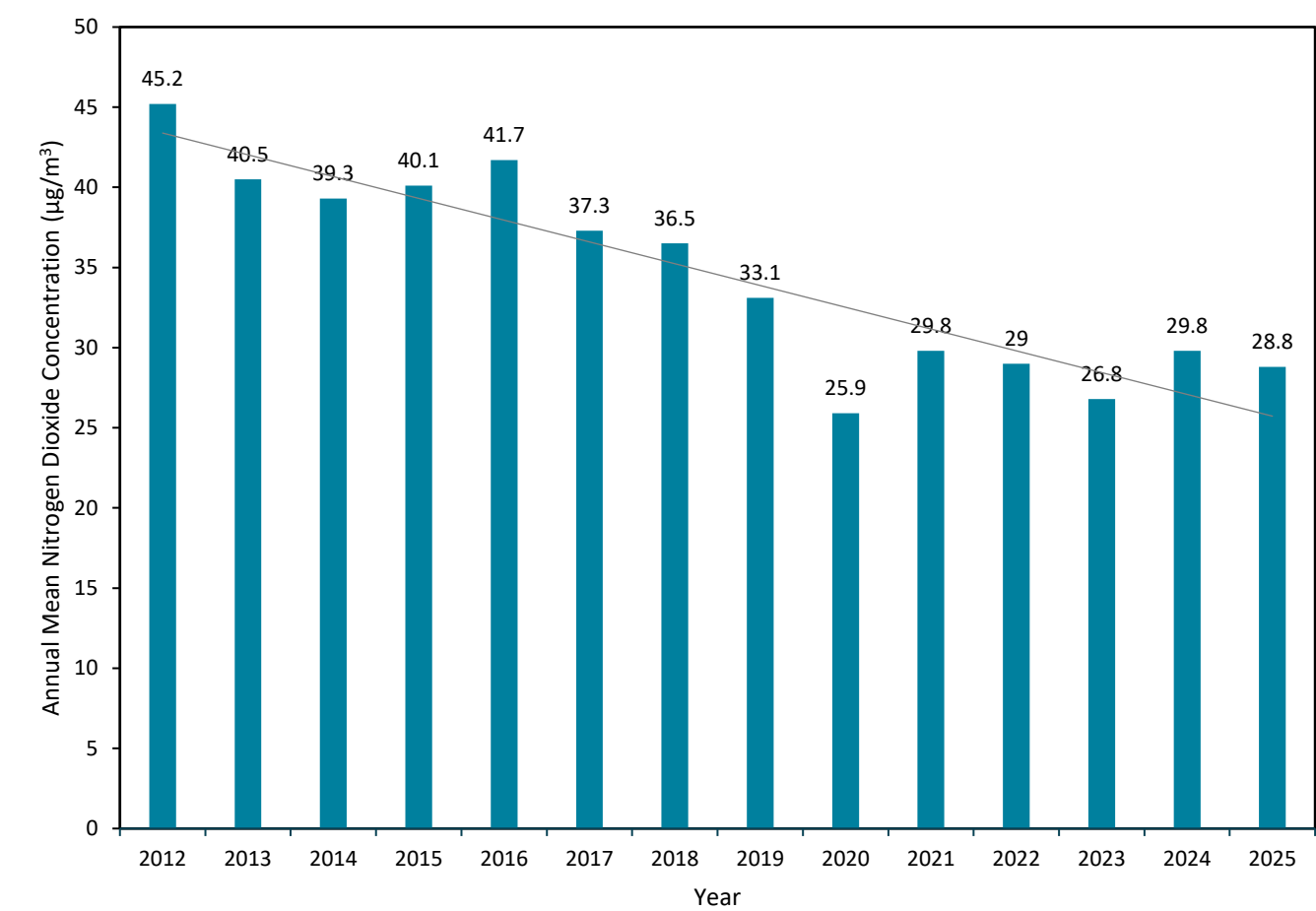


Figure A.1 shows trends in annual mean NO₂ concentrations (µg/m³) measured by diffusion tubes across Kirklees from 2012 to 2025, expressed as network averages. Overall, annual mean concentrations have reduced substantially since 2012. Following the lowest concentrations observed in 2020, levels increased slightly in 2021 and 2022, before declining again in 2023. A further increase was observed in 2024, likely reflecting changes to the monitoring network, including the addition of new tubes at locations of greater exposure. In 2025, average concentrations decreased slightly compared to 2024, continuing the longer-term downward trend. Monitoring across the network will continue to ensure that trends are robustly understood.

Figure A.2 – Trends in annual mean NO₂ concentrations, AQMA 3

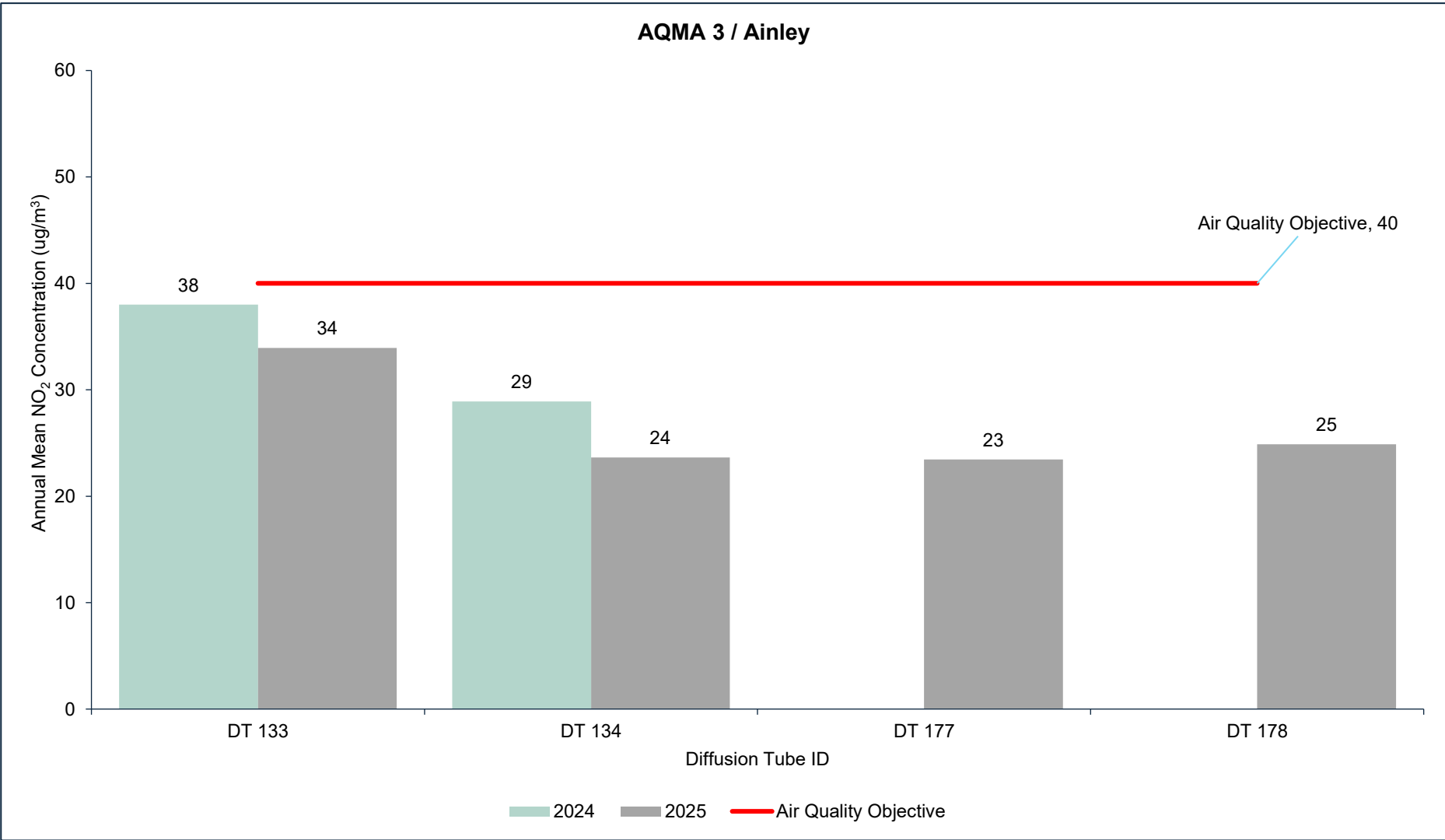


Figure A.2. This chart shows current roadside NO₂ annual mean concentrations between years 2024 to 2025 at all stations in AQMA 3 and the Birchencliffe area. There are no exceedances in the period 2024 to 2025. DT denotes a diffusion tube, and the accompanying number is the diffusion tube ID number.

Figure A.3 – Trends in annual mean NO₂ concentrations (µg/m³), AQMA 5

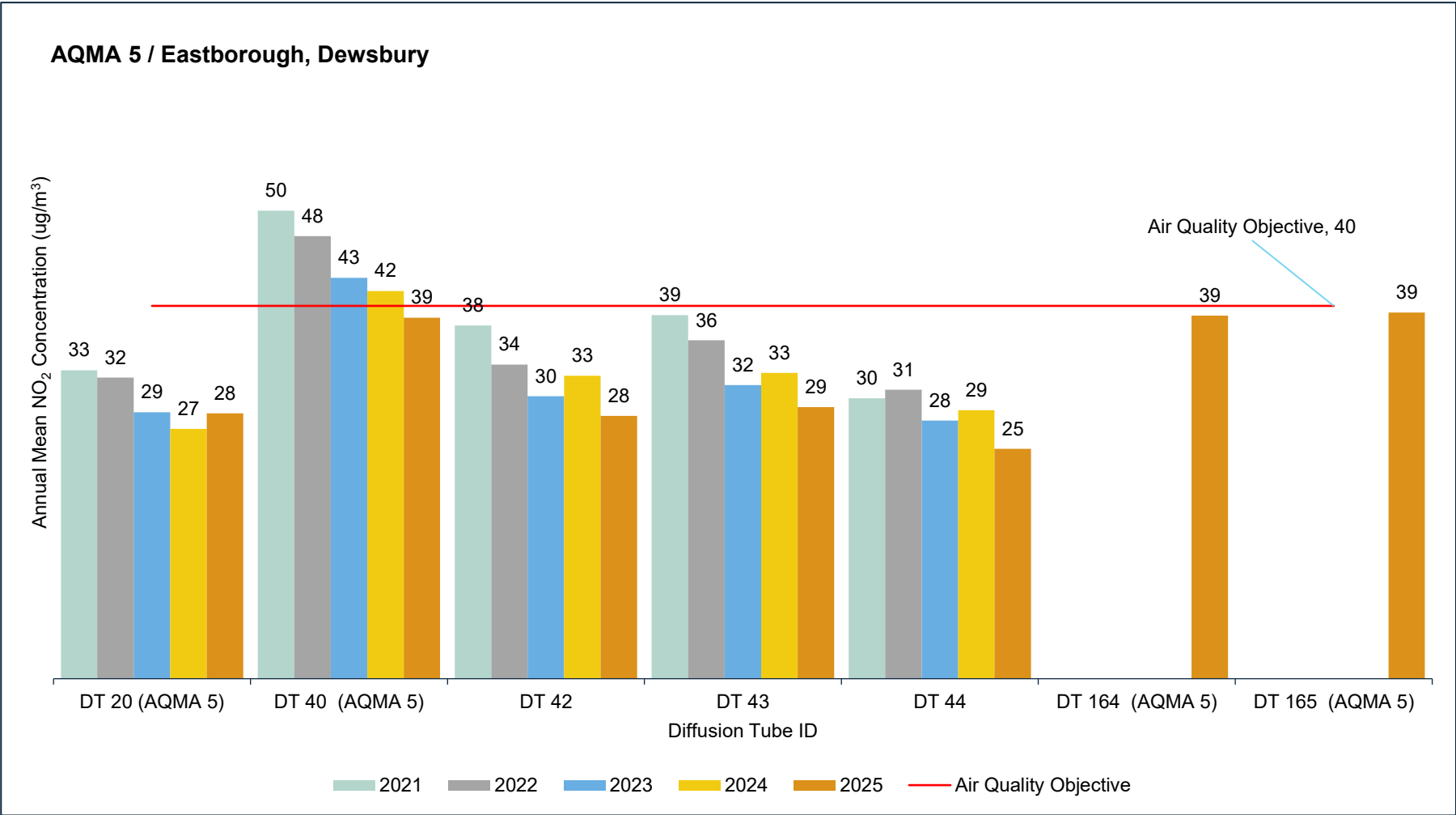


Figure A.3. shows current roadside NO₂ annual mean concentrations between 2021 and 2025 at all monitoring sites within AQMA 5 and the Eastborough and Dewsbury area. There is one site exceeding the annual mean objective of 40 µg/m³ during this period: DT40 (2021–2024). In 2025, two additional sites, DT164 and DT165, recorded concentrations of 39 µg/m³, remaining just below the objective. All other monitoring locations are compliant with the air quality objective throughout the reporting period. DT denotes a diffusion tube, and the accompanying number is the diffusion tube ID number.

Figure A.4 – Trends in annual mean NO₂ concentrations (µg/m³), AQMA 6

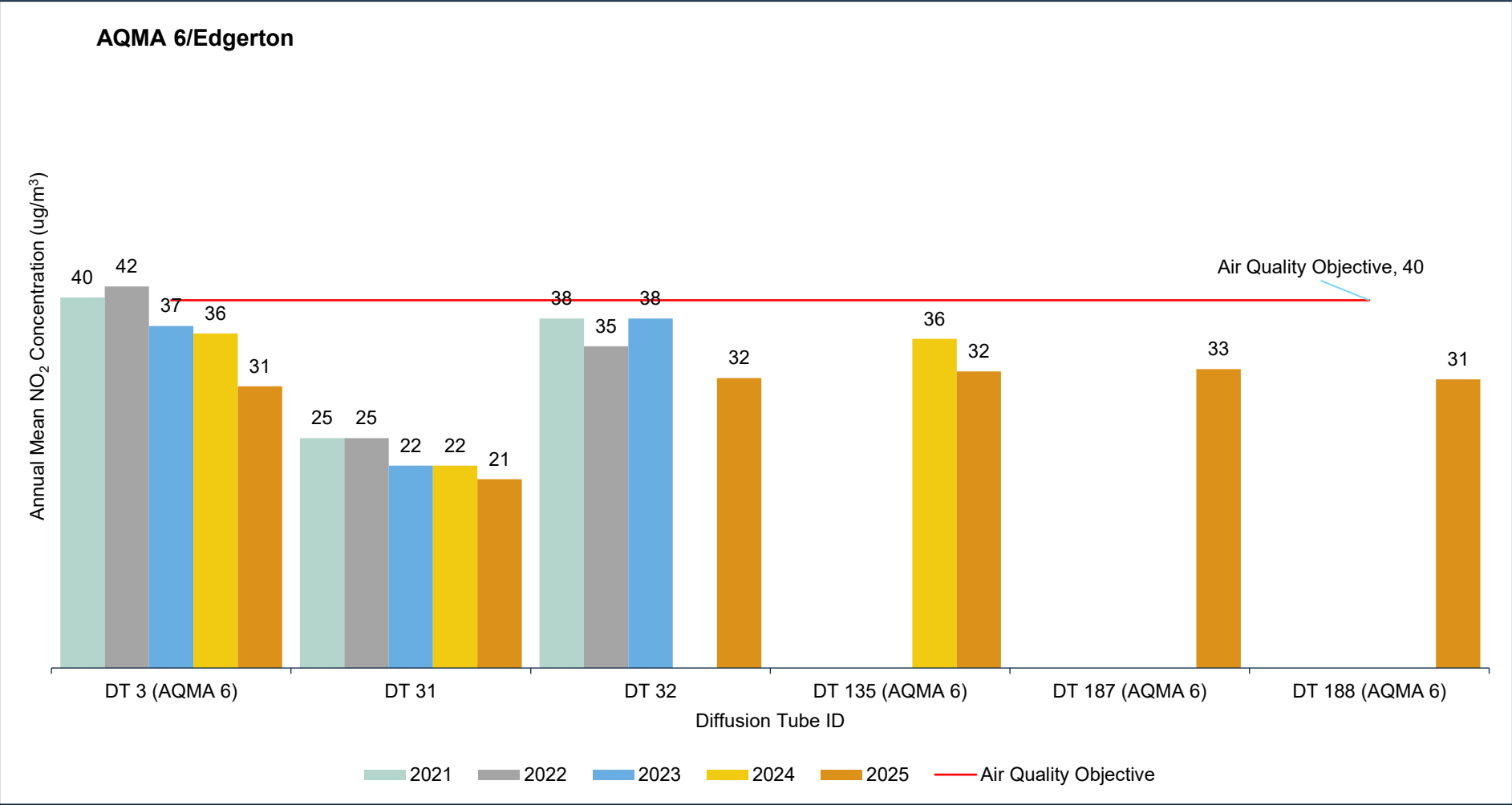


Figure A.4. This chart shows current roadside NO₂ annual mean concentrations between years 2021 to 2025 at all stations in AQMA 6 and the Edgerton area. There is one site in exceedance in the period 2020 to 2024: DT3 (2022 only). Two additional sites, DT187 and DT188, recorded concentrations of less than 36 µg/m³. DT denotes a diffusion tube, and the accompanying number is the diffusion tube ID number.

Figure A.5 – Trends in annual mean NO₂ concentrations (µg/m³), AQMA 7

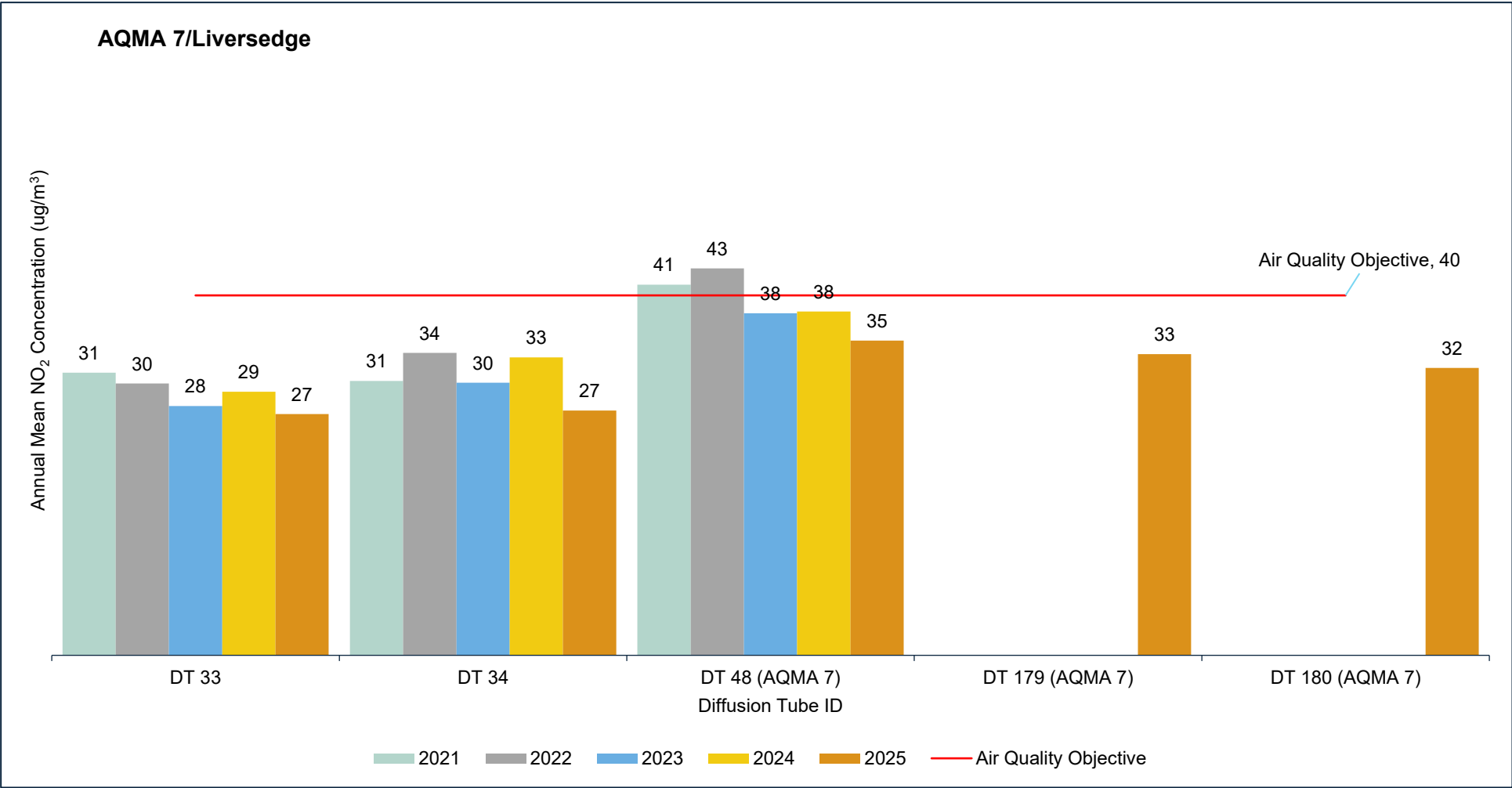


Figure A.5. This chart shows current roadside NO₂ annual mean concentrations between years 2020 to 2025 at all stations in AQMA 7 and the Liversedge and Flush area. There is one site in exceedance of the annual mean objective during this period: DT48 (2021–2022). All other monitoring locations are compliant with the air quality objective throughout the reporting period. DT denotes a diffusion tube, and the accompanying number is the diffusion tube ID number.

Figure A.6 – Trends in annual mean NO₂ concentrations (µg/m³), AQMA 8

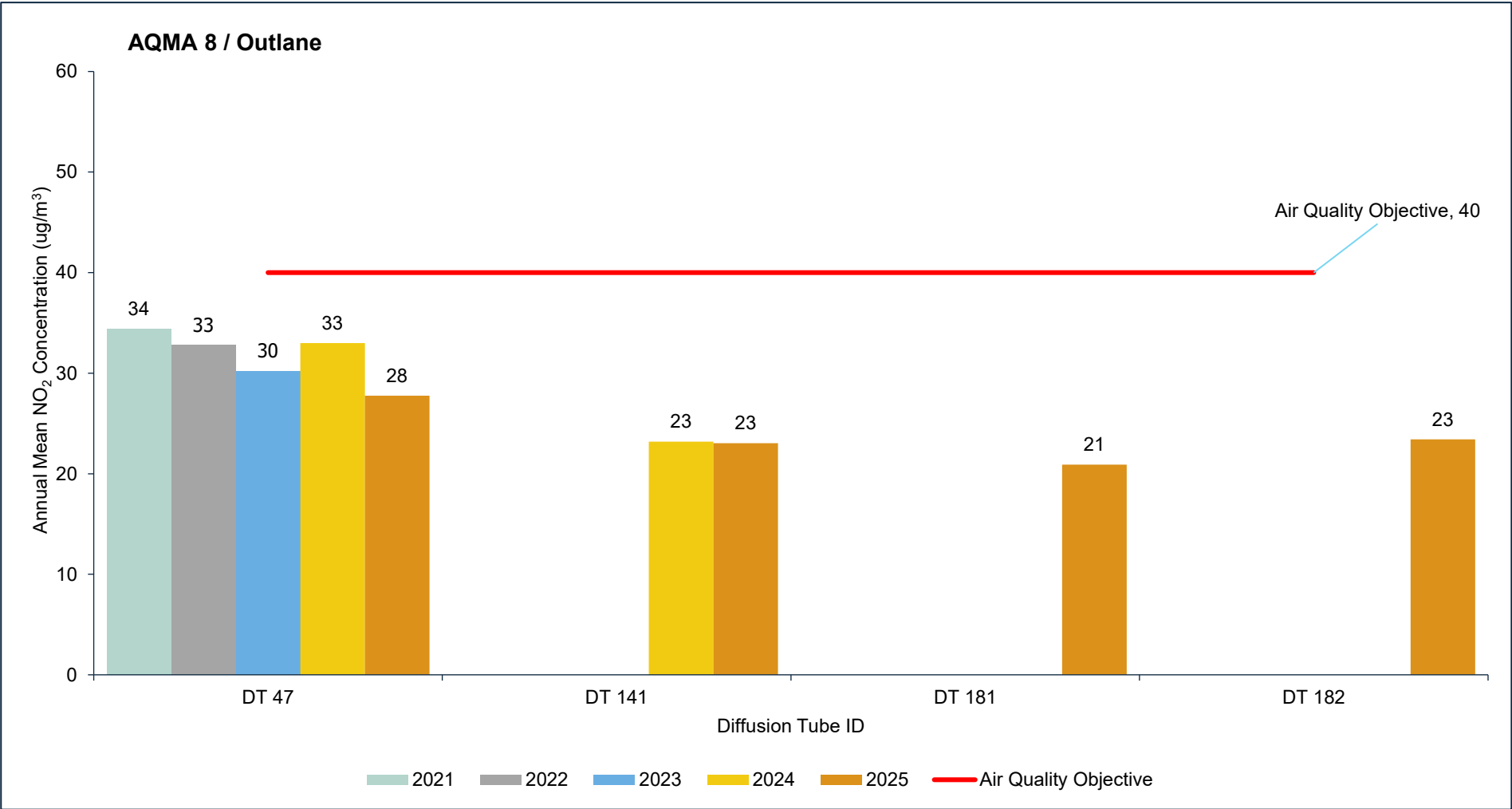


Figure A.6. presents roadside NO₂ annual mean concentrations for the period 2021 to 2025 at all monitoring sites within AQMA 8 and the Outlane area. No sites exceeded the annual mean air quality objective of 40 µg/m³ during this period, with concentrations at all locations remaining well below the objective. DT181 and DT182 were added to the monitoring network in 2025. DT denotes a diffusion tube, and the accompanying number is the diffusion tube ID number.

Figure A.7 – Trends in annual mean NO₂ concentrations, AQMA 9

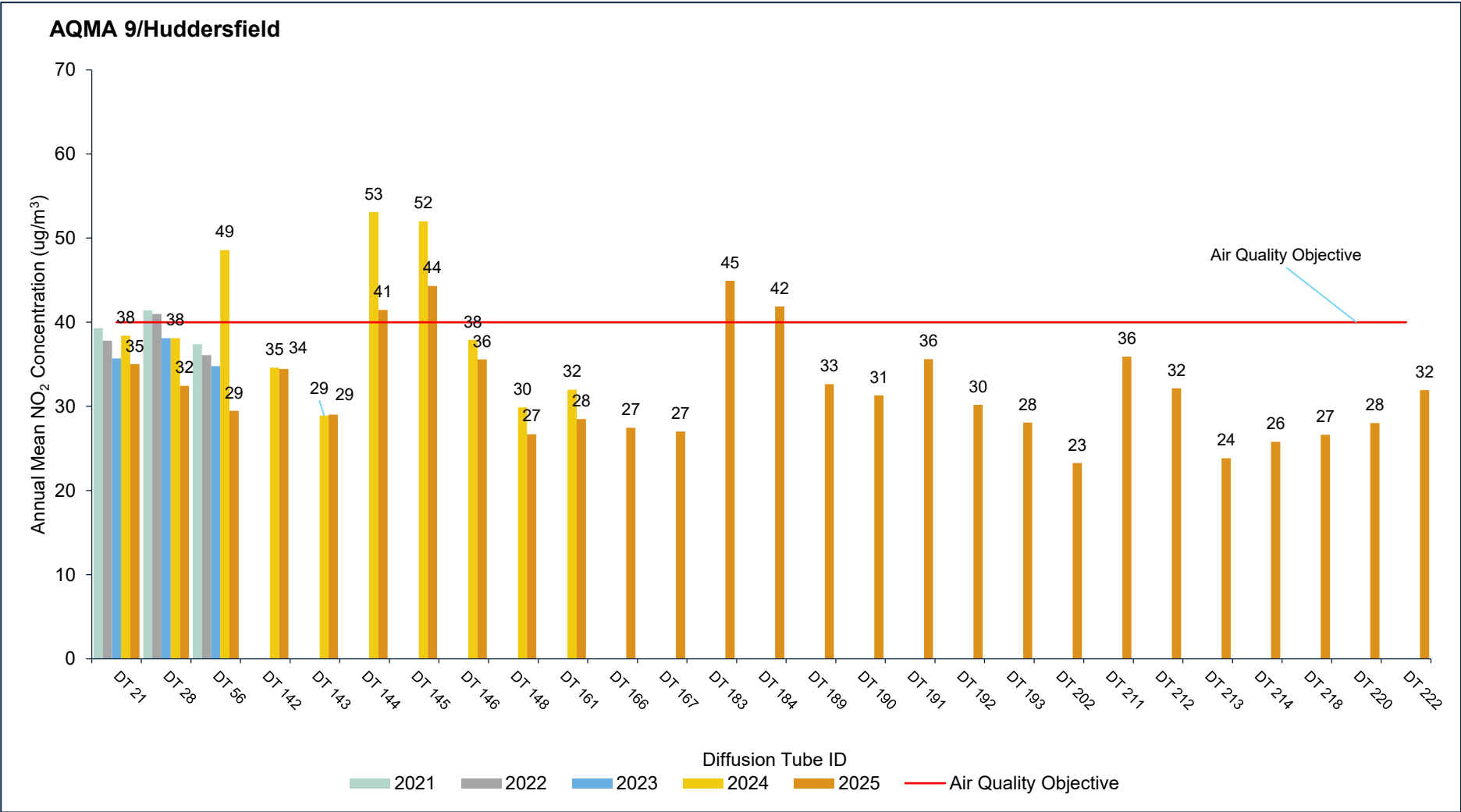


Figure A.7. This chart shows current roadside NO₂ annual mean concentrations between years 2021 to 2025 at all monitoring sites in AQMA 9 and the nearby locations. There are six sites in exceedance in the period 2021 to 2024: DT 28 (2021-2022), DT56, (2024), DT144 and DT145 (2024 – 2025) and DT183 – 184 (2025). DT denotes a diffusion tube, and the accompanying number is the diffusion tube ID number.

Figure A.8 – Trends in annual mean NO₂ concentrations (µg/m³), AQMA 10

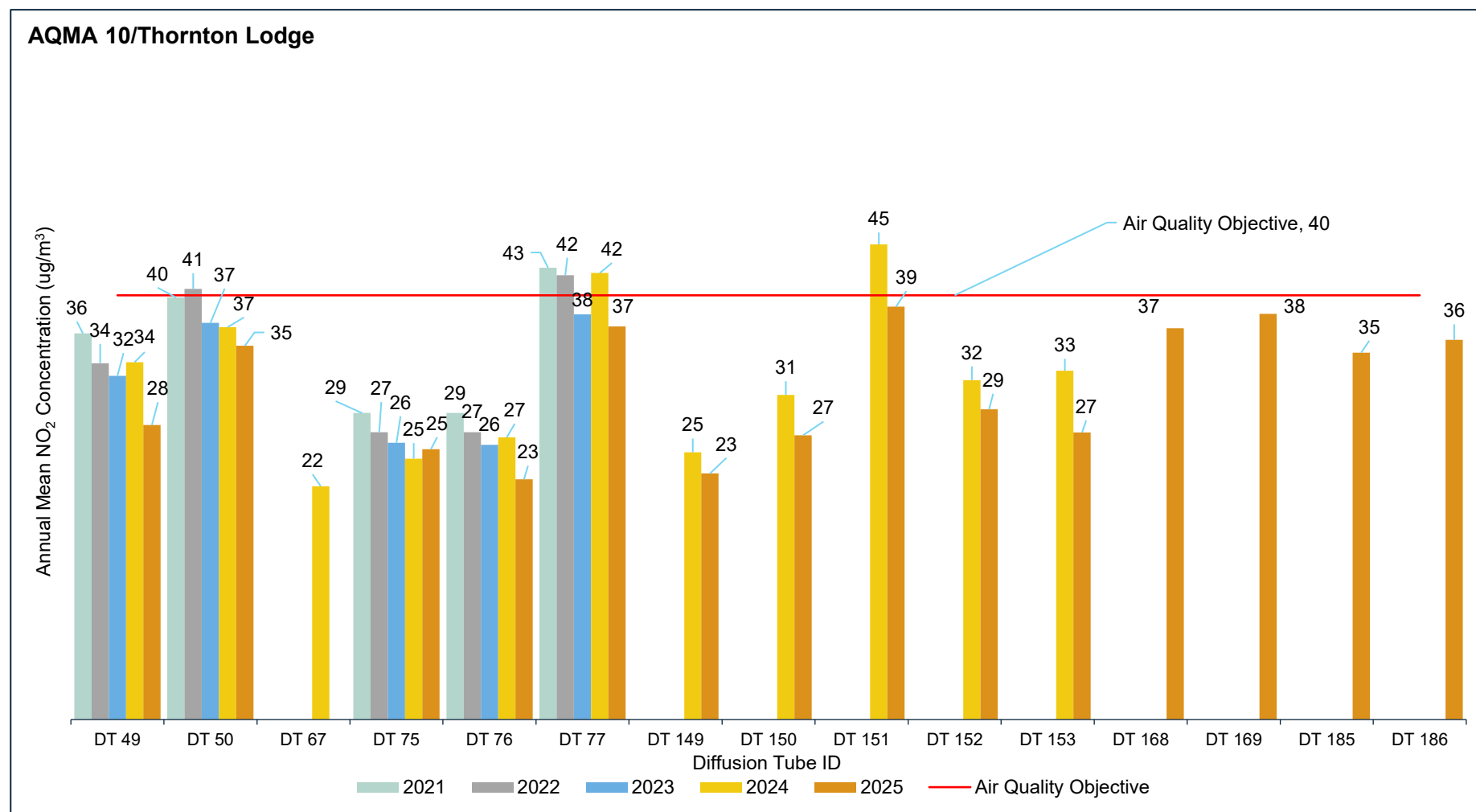


Figure A.8. shows current roadside NO₂ annual mean concentrations between 2021 and 2025 at all monitoring sites within AQMA 10 and the Thornton Lodge area. There are three sites in exceedance of the annual mean air quality objective during this period: DT50 (2022), DT77 (2021, 2022 and 2024) and DT151 (2024). All other monitoring locations are compliant with the air quality objective throughout the reporting period. Four additional sites were added for the 2025 monitoring period. DT denotes a diffusion tube, and the accompanying number is the diffusion tube ID number.

Table A.5 – 1 Hour mean NO₂ monitoring results, number of 1hour means greater than 200µg/m³

Site ID	X OS grid ref (eastin g)	Y OS grid ref (northin g)	Site type	Valid data capture for monitoring period (%) ⁽¹⁾	Valid data capture 2024 (%) ⁽²⁾	2021	2022	2023	2024	2025
CM1	424060	421912	Urban background	89.4	89.4	0	0	0	0	0

Notes:

Results are presented as the number of 1-hour periods where concentrations greater than 200µg/m³ have been recorded.

Exceedances of the NO₂ 1-hour mean objective (200µg/m³ not to be exceeded more than 18 times/year) are shown in **bold**.

If the period of valid data is less than 85%, the 99.8th percentile of 1-hour means is provided in brackets.

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

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

Table A.6 – Annual mean PM₁₀ monitoring results (µg/m₃)

Site ID	X OS grid ref (easting)	Y OS grid ref (northing)	Site type	Valid data capture for monitoring period (%) ⁽¹⁾	Valid data capture 202 (%) ⁽²⁾	2021	2022	2023	2024	2025
CM1	424060	421912	Urban background	99.9	99.9	-	12.6	11.9	12.5	14.1

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

Notes:

The annual mean concentrations are presented as µg/m³.

Exceedances of the PM₁₀ annual mean objective of 40µg/m³ are shown in **bold**.

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.

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

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

Table A.7 – 24 hour mean PM₁₀ monitoring results, number of PM₁₀ 24 hour means greater than 50µg/m³

Site ID	X OS grid ref (easting)	Y OS grid ref (northing)	Site type	Valid data capture for monitoring period (%) ⁽¹⁾	Valid data capture 2025 (%) ⁽²⁾	2021	2022	2023	2024	2025
CM1	424060	421912	Urban background	99.9	99.9	-	0 (20)	2	1	4

Notes:

Results are presented as the number of 24-hour periods where daily mean concentrations greater than 50µg/m³ have been recorded. Exceedances of the PM₁₀ 24-hour mean objective (50µg/m³ not to be exceeded more than 35 times/year) are shown in **bold**.

If the period of valid data is less than 85%, the 90.4th percentile of 24-hour means is provided in brackets.

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

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

Table A.8 – Annual mean PM_{2.5} monitoring results (µg/m³)

Site ID	X OS grid ref (easting)	Y OS grid ref (northing)	Site type	Valid data capture for monitoring period (%) ⁽¹⁾	Valid data capture 2025 (%) ⁽²⁾	2021	2022	2023	2024	2025
CM1	424060	421912	Urban background	99.9	99.9	-	8.3	7.4	8.0	8.8

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

Notes:

The annual mean concentrations are presented as µg/m³.

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.

(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%).

Appendix B: Full monthly diffusion tube results for 2025

DT ID	X OS grid ref (eastin g)	Y OS grid ref (northin g)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual mean: raw data (µg/m³)	Annual mean (µg/m³): annualised and bias adjusted (0.92)	Annual mean (µg/m³): distance corrected to nearest exposure	Comment
3	413504	417439	45.8	25.3	30.4	28.1	28.9	41.3	31.2	37.0	38.4	34.0		30.6	33.3	30.6		
5	422442	420380		38.9	40.3	36.0	33.2	27.1	21.8	35.8	35.4	31.7	36.5	26.3	32.6	30.0		
6	417878	421054	50.9	40.2	36.8	39.2	35.1	32.4	37.0	36.3	37.8	36.5	42.5	41.7	38.6	35.5		
20	424858	421904		38.2	28.8	31.1				32.5	33.3		34.6	34.6	33.3	28.5		
21	414149	416686	47.2	44.5	37.8	38.8		31.6	28.5	37.6	38.5	35.3	44.5	39.3	38.1	35.0		
22	417394	420458		39.2	37.3	30.8	31.6	29.0	24.7	32.7	33.8	29.9	36.8	29.0	32.0	29.4		
23	422300	420337	47.7	43.2	30.9	34.0	28.9	32.7	30.3		37.6	32.5	40.4		35.2	32.4		
25	417255	420360	31.7	30.2	24.5	24.2	22.7	18.4	14.4	22.9	21.3	21.6		26.7	23.2	21.3		
28	414752	416699	52.5	37.7	37.8	30.0		32.8	27.6	33.3	30.3		40.8	35.5	35.3	32.4		
30	423154	420658	47.9	40.9	31.2	34.5	39.7	28.2	27.6	34.2	31.1	36.5	41.7	38.6	35.8	32.9		
31	413400	417495	29.7	26.3	27.5	22.3	21.1	20.0	18.3	20.4	16.7	21.3	26.1	21.4	22.3	20.5		
32	413513	417481	43.6	19.8	34.1	32.6	39.4	32.2	32.0	36.4	38.8	36.2	34.9	32.6	34.3	31.5		
33	420728	423669	39.8	31.2	33.7	30.3	27.2	23.3	19.8	25.4	27.6	29.7	32.9	32.7	29.1	26.8		
34	420845	423770	33.0	33.3	33.6	20.1	31.5	26.7	26.3	31.2	26.9	29.1	33.5	30.8	29.6	27.2		
35	420827	423844	42.8	39.9	35.8				29.9	38.5	31.9	33.8	40.7	38.2	36.5	32.5		
40	424922	421973	59.3	46.7	42.2	43.8	32.8	44.3	34.0	42.6	38.6	42.4	42.7	43.6	42.1	38.7	36.3	
42	424969	422002		37.9	36.3	31.6	28.2	26.3	17.3	31.0	28.0	31.7	35.6	35.7	30.6	28.2		
43	425093	422024	44.4	36.2	34.8	28.7	24.1	27.9	24.5	31.7	33.3	28.0	35.8	36.8	31.7	29.1		
44	425179	422116	39.9		26.9	22.8	20.5	25.9	23.2	26.1	24.7	29.2	30.7	29.1	26.8	24.7		
47	407942	417261	33.9	30.9	25.4	25.0	31.2	34.7	35.6	30.3	31.6	31.7	28.9	23.2	30.2	27.8		
48	421044	423670	55.4	37.8	36.7	32.8	28.0	39.3		34.7	36.9	43.0	41.0	37.7	38.0	35.0		
49	413659	416182	39.8	33.6	20.9	29.4	27.3	28.1	24.4	30.2	32.8	32.3	36.3	30.6	30.2	27.8		
50	413433	415989	51.8	52.1	36.3	35.5	35.7	33.5	26.8	35.6	41.9	32.5	43.6	41.2	38.3	35.2		
55	414185	408260	35.1	27.9	26.2	26.6	23.9	24.0	23.9			25.4	28.5	22.9	26.0	24.0		

DT ID	X OS grid ref (eastin g)	Y OS grid ref (northin g)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual mean: raw data (µg/m³)	Annual mean (µg/m³): annualised and bias adjusted (0.92)	Annual mean (µg/m³): distance corrected to nearest exposure	Comment
56	415009	416420	45.4	34.6	32.6	30.4	20.7	30.0	27.9	31.5	32.5	33.6	35.8	34.9	32.0		29.5	
60	414269	408218	28.3	26.7	25.8	20.9		19.5	16.5	19.1	21.6	21.5	24.5	18.4	21.7		20.0	
75	413153	415894	34.2	36.5	33.6	26.4	27.0	21.2	19.5	24.8	22.4	26.2	32.5	31.4	27.7		25.5	
76	413198	415957	33.1	29.5	31.4	24.3	18.0	19.3	18.9	20.6	24.3	26.5	29.6	24.4	24.6		22.6	
77	413455	416013	51.7	42.1	45.6	37.8	36.3	37.8	38.9	37.1	37.7	38.9	44.7	39.3	40.3		37.1	34.3
82	417508	420570	50.4	40.7	35.4	32.2	27.7	36.1	25.3	36.4	26.6	38.8			34.3		31.6	
95	414170	408118	26.9	24.7	23.5		19.7	17.8	14.6	20.0	18.5			19.7	20.2		19.6	
96	414169	408192		28.3	25.8	28.2	22.7	27.7	21.7	23.0	22.8		34.0	27.2	26.0		23.9	
98	414092	408133	29.2	27.3	28.3	20.5	23.8	21.1	19.7	21.4	17.3	23.7	25.8	25.0	23.5		21.6	
105	424513	424139		27.0	24.3	22.2	19.6		16.3	20.7	15.4	23.3	28.6		21.8		20.0	
106	424425	424171	34.7	30.0	23.9	23.0	18.4	15.5		21.3	21.2	23.8	28.4	24.2	23.7		21.8	
107	424259	424289	44.4	33.6	32.2	24.6	26.8	25.7	13.7	27.2	28.2	31.2	33.5	32.5	28.9		26.6	
133	411689	419100	42.7	37.1	39.5	40.8	32.1	37.9	36.9	35.1	39.8	34.3	39.8	31.2	36.9		33.9	
134	411717	419060	31.8	26.8	34.7	27.2	20.5	17.2	23.4	20.4	29.9	27.1	29.2	23.4	25.7		23.6	
135	413496	417449			31.3	33.6	32.6	37.1	35.8	33.4	36.7	35.9		38.8	35.1		32.3	
136	413527	417416	42.5	33.6	35.8	32.9	30.4	27.5	28.4	27.5	27.0	29.1	33.1	31.7	31.3		28.8	
137	420871	423748	40.5	28.3	30.6	24.0	19.0	20.1	17.1	21.6	25.2	25.6	29.0	31.1	25.5		23.5	
138	420926	423728	38.4	34.0	32.9	24.9	22.1	18.7	18.6	22.9	24.5	23.8	29.3	29.7	26.2		24.1	
139	421087	423659	31.2	30.8	20.0	23.5	15.4	17.0	17.7	19.4	24.3	24.3		26.7	22.5		20.7	
140	421122	423662	34.7	25.6	28.6	33.7	15.9	21.3	19.7	18.2	25.4	25.1	31.0	25.7	25.0		23.0	
141	407912	417316	31.6	34.6	30.4	27.1	25.7	18.4	12.4	29.0	23.2	23.0	27.0	23.5	25.0		23.0	
142	414321	416174	46.8	41.6	42.1	35.7	33.2	33.8	32.9	34.7	39.8	36.5		39.2	37.5		34.5	
143	414718	416451	39.7	33.5	36.5	26.5	31.3	23.4	24.9	27.9			36.1		30.7		29.0	
144	414403	416735		47.5	45.4	50.4	34.8	49.8	44.8	43.7	43.9	47.3			45.1		41.5	39.2
145	414266	416736	61.0	49.3	49.5	45.9	44.5	44.9	40.0	47.5	48.1	49.2	54.0	49.2	48.2		44.3	40.4
146	414222	416731	50.4	43.5	39.1	39.7	35.7	36.5	25.4	40.4		38.1	43.0	40.1	38.7		35.6	
148	414689	416866	41.5	36.3	33.1	26.7	18.9	28.0	24.3	22.0	27.6		37.2	29.8	29.0		26.7	

DT ID	X OS grid ref (eastin g)	Y OS grid ref (northin g)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual mean: raw data (µg/m³)	Annual mean (µg/m³): annualised and bias adjusted (0.92)	Annual mean (µg/m³): distance corrected to nearest exposure	Comment
149	413238	415952	33.9	32.4	29.7	23.9	20.4	23.0	18.2	21.8	27.1	26.5			25.2	23.2		
150	413286	415959	39.1	35.4	31.9	28.0	22.1	25.9	22.8	20.5		30.5	37.5	31.3	29.1	26.8		
151	413520	416030	53.9	47.1	49.7	38.7	34.7	45.7	38.0	42.4	37.3	37.1	50.6	40.0	42.3	38.9	20.5	
152	413223	415920	44.2	36.5	39.3	32.4		28.7	22.9	26.5	29.6	26.0	38.1		31.8	29.3		
153	412750	415719	41.2	34.8	36.6	32.7	23.3	28.7	18.2	34.6	20.2	30.3	28.2	30.8	29.4	27.1		
157	422461	420381	50.5	40.2	39.4	30.9	25.4	37.5	31.3	36.0	34.9	33.6	32.5	34.3	35.0	32.2		
159	413659	415215	41.5	34.5	33.2	27.0	21.9	25.2	18.2	22.8	19.1	22.6	33.3	31.8	27.0	24.9		
160	420775	423783								28.3	31.5		34.2		31.3	28.8		
161	414400	416753	41.2	32.8	35.6	26.5	21.6	30.4	29.6	32.5	33.0		33.2	29.5	31.0	28.5		
162	413192	415378	39.2	33.0	35.0	28.6	27.1	28.2	23.4	24.0	29.2	30.3	31.2	28.5	29.4	27.1		
164	424922	421973	61.8	45.1	45.8	36.2	38.7	43.9	36.9	41.3	39.4	42.4	41.3	41.7	42.3	38.9	36.5	
165	424922	421973	54.9	49.4	46.4	43.0	38.7	41.4	36.2	43.5	39.4	43.9	42.4	39.2	42.7	39.3	36.8	
166	414689	416866	36.9	31.9	36.4	26.6	21.0		23.7	29.3	30.1		36.0	31.6	29.9	27.5		
167	414689	416866	37.7	32.0	31.2	27.8	19.6	25.5	27.4	27.4	30.5	31.7	34.8	30.7	29.4	27.0		
168	413455	416013	52.6	47.3	48.2	36.3	21.1	40.6	40.9	35.0	36.5	42.5	46.2	40.7	40.1	36.9	34.2	
169	413455	416013	49.1	43.6	45.3	35.3	39.7	41.0	42.3	37.5	41.6	41.5	42.6	41.4	41.6	38.2	35.4	
170	414073	416180	32.5	34.8	33.7	31.1	32.1	22.8	17.8	25.7	26.9	25.8	33.1	29.4	28.5	26.3		
171	413439	417401				18.0							31.7		24.8	22.8		
172	413467	417441	32.1		38.9	37.3	33.2	23.4	21.9	29.3	27.1	24.7	35.3	28.1	29.8	27.4		
173	423154	420658	46.4	39.7	37.8	35.1	37.0	34.8	24.2	37.1	32.0	36.4	43.4	37.2	36.4	33.4		
174	423154	420658	48.6	41.5	45.5	33.6	42.4		26.2	35.8	34.5	32.2	38.9	37.5	37.4	34.4		
175	422461	420381	50.0	39.6	42.4	34.3	26.6	36.0	28.4	35.7	37.9	32.3	35.4	34.9	35.5	32.6		
176	422461	420381	49.6	40.2	39.2	36.2	27.3	36.0	30.9	34.1	32.5	37.4	30.6	30.4	34.8	32.0		
177	411717	419060	33.4	24.0	28.8	26.1	19.1	20.6	21.8	23.4	27.7	27.5	29.0	27.6	25.5	23.4		
178	411717	419060	32.5	28.5	34.8	25.4	21.8	22.5		23.0	26.4		32.7	25.7	27.0	24.9		
179	421044	423670	53.8	37.5	36.3	32.0	30.8	35.2	32.1	39.3	25.8	39.0	41.4	38.6	36.4	33.5		
180	421044	423670	48.9	38.5	31.8	30.4	29.9	35.1	31.2	32.8	38.6	37.0	29.1	37.1	34.7	31.9		

DT ID	X OS grid ref (eastin g)	Y OS grid ref (northin g)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual mean: raw data (µg/m³)	Annual mean (µg/m³): annualised and bias adjusted (0.92)	Annual mean (µg/m³): distance corrected to nearest exposure	Comment
181	407912	417316	16.6	28.5	27.0	32.5	25.7	18.4	11.6	24.3	26.7	12.2	25.1	26.4	22.7		20.9	
182	407912	417316	32.7	33.0	27.1	33.3	25.7	17.8	11.4	27.0	26.5	20.7	27.2	28.6	25.5		23.4	
183	414266	416736	59.2	53.7	53.2	52.9	42.9	46.8	41.9	49.6	49.0	48.0	48.1	46.9	48.8		44.9	41.0
184	414266	416736	61.4	54.9	41.6	51.3	44.1	22.0	41.6	49.2	48.9	43.9	49.2	43.8	45.5		41.9	38.3
185	413433	415989	49.2	45.5	44.4	35.3	30.1	35.3	25.7	39.4	37.7	33.5		44.2	37.6		34.6	
186	413433	415989	47.8	43.3	44.7	38.4	39.9	37.1	25.8	35.8	31.2	37.1	47.6	42.7	38.9		35.8	
187	413504	417439	44.3	21.8	30.9	30.9	27.4	40.8	39.2	36.2	40.7	36.4	41.4	36.6	35.3		32.5	
188	413504	417439	42.6	25.1	31.3	29.3	27.7	38.6	34.0	37.5	39.0	37.0	35.8		34.1		31.4	
189	414247	416775	43.3	44.2	43.4	37.9	30.5	22.7	29.5	39.3	32.6	33.2	37.4	36.6	35.5		32.7	
190	414248	416702	40.1	38.9	40.4	35.1	33.5	27.5	25.8	38.7	30.8	29.6	41.1	32.3	34.0		31.3	
191	414216	416708	47.9	44.2	47.1	39.5	32.8	33.3	30.4	34.7	37.8	37.0	45.2	40.4	38.7		35.6	
192	414486	416745	43.9	36.8	36.1	34.6	32.5	23.5	24.6	27.8	31.3	29.3	43.3	35.0	32.8		30.2	
193	414619	416745	39.0	35.9	29.0		25.3	27.4	23.1	29.2	32.8	31.7	38.6	28.7	30.5		28.1	
194	417394	420458		40.5	40.1	32.8	31.8	31.1	21.7	34.8	27.7	29.0	34.9	34.8	32.4		29.8	
195	417394	420458			33.0	31.1	31.7	29.4	24.8	36.1	32.6	34.2	36.1	33.6	32.2		29.6	
196	420926	423728	<1.23		1.9	<0.59	4.6	1.0	1.1		0.8	<0.73	0.8	0.7	1.6		1.6	
197	416264	418528			34.9	24.1	21.8	23.4	10.0	29.4	31.0	29.6	28.6	25.3	25.4		23.4	
198	416096	418408			35.7	23.8	29.5	27.3	24.1	31.0	35.1	32.8	38.2	38.5	31.6		29.0	
199	415339	417962			47.6	38.0	39.2	39.1	35.3	38.4	40.4	43.8	46.9	38.1	40.5		37.3	33.2
200	415329	417927			29.5	27.1	16.6	29.7	24.3	31.4	33.9	28.8	36.6	35.8	29.1		26.8	
201	415032	417747			28.1	31.9	32.6	24.7	21.4	28.2	27.7	31.2	35.1	35.9	29.7		27.4	
202	414722	417014			27.0	22.8	19.6	22.9	16.6	25.5	29.7	28.2	32.1	30.1	25.3		23.3	
203	413192	415378					27.3	27.3	20.2	26.7	29.3	27.6	33.7		27.2		30.6	
204	413192	415378					25.8	28.4	19.5	28.2	32.8	28.1		25.2	26.6		30.5	
205	412750	415719					26.6	28.3	17.4	34.1	34.3	30.2	33.7	34.5	29.6		32.1	
206	412750	415719					30.0	25.7	18.6	40.3	26.1	31.0		26.2	28.0		32.2	
207	411841	414743					14.5	14.0	10.0	16.2	12.5	17.1	21.6	17.2	15.3		16.6	

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 (µg/m³)	Annual mean (µg/m³): annualised and bias adjusted (0.92)	Annual mean (µg/m³): distance corrected to nearest exposure	Comment
208	412800	415430					11.7	10.4	8.5	12.7	13.8	13.7	16.9	14.5	12.7		13.8	
209	412943	415572					18.3	14.0	11.7	26.2			36.0	22.8	21.1		23.5	
210	412981	415364					16.5	12.2	11.2	14.4	13.7	15.5	20.9	17.1	15.2		16.4	
211	414718	416451					35.4	27.3	25.2	29.3			33.3		30.1		35.9	
212	414718	416451					27.9	25.6	24.7	26.9	31.6		38.1	31.3	29.3		32.2	
213	414722	417014					18.9		15.8	22.5	29.1	22.3	29.8	23.0	22.7		23.8	
214	414722	417014					19.7	18.4	22.6	21.3	22.2	26.4	31.5	28.0	23.8		25.8	
215	413859	416910					32.1	20.6	19.4	27.6	18.4	24.9	31.2	28.5	25.4		27.5	
216	414041	416754					35.2	23.5	24.5	30.3	29.8	29.6	29.8	28.9	29.0		31.4	
217	414017	417003					22.7	22.2	22.1	22.7	26.3	27.2	29.3	25.8	24.8		26.8	
218	414101	416943					22.0	20.5	16.3	25.3	25.2	28.3	31.7	28.2	24.6		26.6	
219	414675	417213					17.8	18.6	14.3	21.5	26.4	25.1	33.1	29.4	23.1		25.0	
220	414280	416523					21.6	24.9	19.5	26.3	24.6	28.3	34.6	28.4	25.9		28.0	
221	414073	416455					22.0	40.8		21.5	22.9	23.5	27.2	29.9	26.7		27.6	
222	414366	417124					26.9	28.9	25.8	27.3		28.3	35.6	31.9	29.1		31.9	
223	414345	417334					22.0	18.5	19.3	25.0	28.6	24.7		26.0	23.4		26.9	
224	414518	417777					24.2	23.7	22.9	25.7	30.4	28.5	31.5	32.0	27.3		29.6	
225	414599	418344					27.3	21.3	17.5	29.2	27.8	27.7	33.1	26.3	26.1		28.3	
226	413592	415227							28.6	29.4	29.8		34.7	28.2	30.0		30.5	
227	413554	415124							20.4	27.3	25.3	26.0	32.1	25.1	25.8		26.2	

☒ All erroneous data has been removed from the NO₂ diffusion tube dataset presented in Table B.1. (indicated in the table with “Err”)

☒ 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.

☒ Kirklees Council 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 Kirklees Council during 2025

There are a number of planning applications for developments which may have an impact on air quality in Kirklees during 2025 and in future monitoring years. They are detailed in Table C.1a below.

The Council's Pollution and Noise Control team are consulted on planning applications that may impact air quality. Air quality is considered within the planning process having regard to the National Planning Policy Framework (NPPF), relevant Planning Practice Guidance, the adopted Kirklees Local Plan, and the West Yorkshire Low Emission Strategy ([WYLES guidance](#)).

Relevant applications are reviewed and advice is provided on the need for air quality assessment and mitigation. Where appropriate, it may be recommended that mitigation is secured through planning conditions or, where necessary, through Section 106 planning obligations.

For major developments, the WYLES approach may require the calculation of pollutant emissions damage costs to determine the value of mitigation required to address the air quality impacts of the development. Developers are expected to identify and implement appropriate mitigation measures, with the estimated value of those measures being equivalent to the calculated emissions damage cost where applicable.

All planning applications in Kirklees can be viewed using the [online planning portal](#).

Table C.1a Summary of ongoing developments with the potential to impact air quality in Kirklees

Planning Application	Development Description	Type	AQMA
Land off Lindley Moor Road, Lindley, Huddersfield, HD3 3SX	Hybrid Planning Application for the erection of an industrial unit for B2 /B8 use, with ancillary office space and associated access, parking, groundworks and landscaping in conjunction with an outline application for mixed use development use class E(b),B2 and B8, with ancillary office space and associated works. This site is under development and will be reported on in future ASRs	Mixed Commercial	3

Planning Application	Development Description	Type	AQMA
Various locations - A629, Halifax Road, Huddersfield	<p>Improvement and widening of the A629 to include junction improvements, re-positioning of footways and footway improvements, pedestrian crossing provision, the alteration, demolition and erection of walls, construction of retaining walls, erection of fencing, hard and soft landscaping to include the removal of trees and replacement planting, replacement street lighting, change of use of land to highway and change of use to and formation of car park on land adjoining 103 Halifax Road (within a Conservation Area)</p> <p>Road improvements have commenced in September 2025. Progress with this scheme will be reported on in future ASRs</p>	Road Scheme	3, 6
Land at Owl Lane, Chidswell, Dewsbury	<p>Erection of 260 dwellings with open space, landscaping and associated infrastructure</p> <p>This site is under development and will be reported on in future ASRs</p>	Residential	5
Land east of, Leeds Road, Chidswell, Shaw Cross, Dewsbury	<p>Outline planning application for demolition of existing dwellings and development of phased, mixed use scheme comprising residential development (up to 1,354 dwellings), employment development (up to 35 hectares of B1(part a and c), B2, B8 uses), residential institution (C2) development (up to 1 hectare), a local centre (comprising A1/A2/A3/A4/A5/D1 uses), a 2 form entry primary school including early years provision, green space, access and other associated infrastructure (amended and further information received)</p> <p>Development has not commenced at this site. We continue to monitor in this area, and will be reported on in future ASRs</p>	Mixed residential and commercial	5
Land south of, Heybeck Lane, Chidswell, Shaw Cross, Dewsbury	<p>Outline application for residential development (Use Class C3) of up to 181 dwellings, engineering and site works, demolition of existing property, landscaping, drainage and other associated infrastructure</p> <p>This site is still under development and will be reported on in future ASRs</p>	Residential	5

Planning Application	Development Description	Type	AQMA
Land off Soothill Lane, Batley	Outline application for residential development of up to 366 dwellings with details of access points only This site is under development and will be reported on in future ASRs	Residential	5
Edgerton Road, Edgerton, Huddersfield, HD3 3AA	Outline application for residential development comprising of 41 dwellings plus associated works (within a Conservation Area) This site is still under development and will be reported on in future ASRs	Residential	6
Former Kirklees College, New North Road, Huddersfield, HD1 5NN	Hybrid Planning Application for mixed use development - retail/office and 229 residential units (Use Classes C3/ E(a) /B1a). Full Planning permission for the partial demolition of the former Kirklees College, erection of a food retail store and alterations in connection with conversion of grade ii* listed building to offices/apartments and creation of vehicular access from Portland Street, New North Road and Trinity Street. Outline application for erection of (two) buildings (residential apartments - C3 Use) (Listed Building within a Conservation Area) The food retail store has been completed. The remaining aspects of this development are still under development and will be reported on in future ASRs	Mixed residential and commercial	9
Piazza Centre, Princess Alexandra Walk, Huddersfield, HD1 2RS	Demolition of existing Piazza shopping centre; part removal of Queensgate Market; demolition/retention of service tunnels; redevelopment of the site to form new public realm space (including public park and gardens, play areas, public square/outdoor event space); refurbishment and change of use of existing Queensgate Market Hall into food hall (Use Class E (b) sale of food and drink for consumption, mostly, on the premises); refurbishment and extension of existing library and art gallery building to form museum (Use Class F.1); change of use of part existing market hall building and extension to form public library (Use Class F.1); erection of indoor event venue incorporating multi-storey car park below	Commercial	9

Planning Application	Development Description	Type	AQMA
	<p>(Sui-Generis); erection of public gallery building (Class F.1); associated infrastructure on land and buildings at Queensgate Market, Huddersfield Library and Art Gallery, and Piazza (and The Shambles) Shopping Centre (part Listed Building/part within a Conservation Area)</p> <p>Phase 1 of this development is near completion. Phase 2 is due to commence in June 2026. This site is still under development and will be reported on in future ASRs</p>		
Land at Penistone Road, Fenay Bridge, Huddersfield, HD8 0AW	<p>Erection of 68 dwellings with associated access, parking, open space, landscaping and infrastructure works (including installation of surface water attenuation tank)</p> <p>This site is still under development and will be reported on in future ASRs</p>	Residential	9
Former St Luke's Hospital, Blackmoorfoot Road, Crosland Moor, Huddersfield, HD4 5RQ	<p>Outline application for phased development comprising up to 200 dwellings with associated infrastructure and open space; retail units (open use class A1); accommodation for potential neighbourhood uses (use class A2/D1/D2/sui generis); restaurant/public house (use class A3/A4); and petrol filling station (sui generis)</p> <p>The residential phase of this development is complete.</p> <p>The commercial aspect of this development has not commenced. We continue to monitor in this area, and will be reported on in future ASRs</p>	Mixed commercial and residential	10
Land off, Blackmoorfoot Road and Felks Street, Crosland Moor, Huddersfield, HD4 7AD	<p>Outline application (with details of points of access only) for the development of up to 770 residential dwellings (Use Class C3), including up to 70 care apartments (Use Classes C2/C3) with doctors surgery of up to 350 sq m (Use Class D1); up to 500 sq m of Use Class A1/A2/A3/A4/A5/D1 floorspace (dual use), vehicular and pedestrian access points off Blackmoorfoot Road and Felks Stile Road and associated works.</p> <p>This site is still under development and will be reported on in future ASRs</p>	Mixed commercial and residential	10

Planning Application	Development Description	Type	AQMA
Kirklees College, Halifax Road, Dewsbury, WF13 2AS	Demolition of part of former college buildings and erection of police station, including conversion of Oldroyd Building and erection of new buildings comprising police custody suite, associated support services buildings, decked and surface car parking, vehicle access point, boundary treatments and landscaping This site is still under development and will be reported on in future ASRs	Commercial	5
Land at, Blackmoorfoot Road, Crosland Hill, Huddersfield, HD4 5NU	Hybrid planning application comprising full application for erection of industrial units (use classes E(g)(ii-iii), B2, and B8) in Units 1 and 2, including ancillary offices, mezzanines, landscaping, parking and formation of new access, and outline application with all matters reserved for erection of industrial units (use classes E(g)(ii-iii), B2, and B8). This application is currently under consideration and has not yet been determined.	Mixed commercial	10
Land off, Forge Lane, Thornhill Lees, Dewsbury, WF12	Outline application, including the consideration of access and layout, for two commercial units (use class B2 and/or B8) and associated works This application is currently under consideration and has not yet been determined.	Commercial	2

Additional air quality works undertaken by Kirklees Council during 2025

During the reporting year, Kirklees Council has continued to develop the evidence base to support AQMA review, AQAP development, and the implementation of air quality measures, in accordance with LAQM requirements.

The 2025 ASR identified sustained reductions in NO₂ concentrations, with long-term monitoring data demonstrating compliance with the annual mean objective at a number of locations over multiple years. This evidence, supported by Defra appraisal, provided the basis for progressing AQMA revocations and boundary amendments.

Monitoring has continued throughout 2025, including an expanded and refined diffusion tube network and ongoing operation of the Council's automatic monitoring station. All data

have been subject to QA/QC procedures in accordance with LAQM.TG22, including bias adjustment, annualisation and distance correction.

On the basis of this evidence, the Council revoked AQMAs 1, 2 and 4, and amended AQMAs 3, 7 and 10 on 11th November 2025. These changes were supported by monitoring data demonstrating sustained compliance with the relevant air quality objectives and confirming that continued designation was no longer required in these areas.

Additionally, Kirklees Council has progressed the development of a new AQAP for the period 2026-2031, with a draft submitted to Defra in May 2026. The AQAP sets out the measures the Council will implement to further improve air quality across Kirklees and ensure continued compliance with air quality objectives.

As part of the AQAP evidence base, modelling was undertaken as part of the AQAP and this will inform the actions to be taken to improve air quality in any remaining AQMAs. In addition, to support delivery of the AQAP, an Air Quality Steering Group has been established, bringing together key internal services and partners. The group will meet on a regular (at least annual) basis to oversee progress, monitor delivery of actions, and ensure alignment with wider transport, planning, climate change and public health priorities.

The Council has commissioned work to develop a district-wide baseline air quality model to support the emerging Local Plan, with technical work commencing in October 2025 which continues to be underway. This will further strengthen the evidence base for strategic planning and future air quality management throughout Kirklees.

QA/QC of diffusion tube monitoring

The diffusion tubes used during the 2025 monitoring period were supplied and analysed by Gradko, using the 50% triethanolamine (TEA) in acetone preparation method. Gradko is a UKAS-accredited laboratory and participates in the AIR-PT proficiency testing scheme for NO₂ diffusion tube analysis, as well as the Annual Field Intercomparison Exercise. These schemes set strict performance criteria, ensuring that participating laboratories achieve a high standard of analytical accuracy.

For the 2025 AIR-PT rounds (AR068 to AR072; January to December)⁹, Gradko achieved scores ranging from 50% to 100%, with the lower scores recorded in the earlier rounds (January to February). The AIR-PT performance score represents the proportion of results deemed satisfactory, based on a z-score acceptance criterion of ± 2 .

A total of 18 local authority co-location studies utilising Gradko tubes (50% TEA in acetone) reported “good” precision, as reported in the National Diffusion Tube Bias Adjustment Factor Spreadsheet (v.03/26)¹⁰. Precision reflects both the laboratory’s consistency in tube preparation and analysis, and the handling of tubes during deployment and retrieval. Diffusion tube precision is classified as “good” where the coefficient of variation for duplicate or triplicate tubes, over at least eight monitoring periods within a year, is less than 20%.

⁹ Defra - (2025) AIR NO₂ Proficiency Testing (PT) Scheme: Summary of laboratory performance in AIR PT rounds 55–68 (January 2023 to February 2025).

¹⁰ National Bias Adjustment Factor Spreadsheet: [Database Diffusion Tube Bias Factors v03_26.xlsx](#)

Monitoring across Kirklees Council during 2025 was undertaken in accordance with the [Defra NO₂ Diffusion Tube Monitoring Calendar](#)¹¹. Monthly changeovers were completed within the recommended tolerance of ± 2 days, with the exception of the January monitoring period. Due to adverse weather conditions, the January changeover was undertaken six days later than the scheduled date (14th January 2025), resulting in an exposure duration of just over three weeks.

To calculate the annual mean concentration, a time-weighted average has been applied to the monthly diffusion tube results.

As outlined in LAQM Technical Guidance TG22 (Chapter 7 – Diffusion Tubes), “so long as the diffusion tube calendar is adhered to, then even though the periods that the tubes are out varies, it is acceptable to do a simple average. If the periods that the tubes were out varied beyond the four to five week recommendation, then it may be necessary to do a time weighted average.”

In this instance, the January exposure period was shorter than the recommended 4–5 week duration (approximately 3 weeks). Therefore, a time-weighted averaging approach has been adopted to ensure each monitoring period contributes proportionally to the calculated annual mean, in accordance with TG22 guidance.

As part of routine data quality assurance and control procedures, results considered to be anomalous and unrepresentative (i.e. concentrations less than 3 $\mu\text{g}/\text{m}^3$) were excluded from the 2025 dataset prior to analysis.

¹¹ Defra - NO₂ diffusion tube monitoring calendar. Available at: <https://laqm.defra.gov.uk/air-quality/air-quality-assessment/diffusion-tube-monitoring-calendar/>

Diffusion tube annualisation

Annualisation is required for any site with data capture less than 75% but greater than 25%. Our Kirklees Council 2025 diffusion tube data have been annualised where required using Defra's Diffusion Tube Data Processing Tool v6.1, following guidance within Chapter 7 of LAQM.TG22: NO_x and NO₂ Monitoring, including the procedure laid out in Box 7-10.

In 2025, 30 diffusion tubes required annualisation as data capture was equal to or below 75%. These diffusion tubes were therefore annualised for 2025.

The four urban background continuous monitoring sites within the region used to calculate the annualisation factors were Leeds Centre, Dewsbury Ashworth Grange, Manchester Piccadilly and Bradford Mayo Avenue. Annualised data are presented in Table C.1 below. The diffusion tubes sites requiring annualisation of 2025 data are listed under Site ID.

Table C.1 – Annualisation summary (concentrations presented in microgrammes per cubic metre ((µg/m³))

Site ID	Annualisation Factor Leeds Centre	Annualisation Factor Dewsbury Ashworth Grange	Annualisation Factor Manchester Piccadilly	Annualisation Factor Bradford Mayo Avenue	Average Annualisation Factor	Raw Data Time Weighted Annual Mean (µg/m ³)	Annualised Data Time Weighted Annual Mean (µg/m ³)
20	0.9178	0.9523	0.9290	0.9142	0.9283	33.3	31.0
35	0.9319	0.9670	0.9639	1.0096	0.9681	36.5	35.3
95	1.0770	1.0558	1.0515	1.0255	1.0524	20.2	21.3
143	1.0691	1.0303	1.0188	0.9895	1.0269	30.7	31.6
196	1.1073	1.1135	1.0955	1.0583	1.0937	1.6	1.7
203	1.1970	1.2740	1.2340	1.1875	1.2231	27.2	33.3
204	1.2241	1.3132	1.2635	1.1899	1.2477	26.6	33.2
205	1.1419	1.2220	1.1872	1.1603	1.1779	29.6	34.8
206	1.2241	1.3132	1.2635	1.1899	1.2477	28.0	34.9
207	1.1419	1.2220	1.1872	1.1603	1.1779	15.3	18.1
208	1.1419	1.2220	1.1872	1.1603	1.1779	12.7	15.0
209	1.2198	1.2770	1.2108	1.1516	1.2148	21.1	25.6
210	1.1419	1.2220	1.1872	1.1603	1.1779	15.2	17.9
211	1.3293	1.3827	1.2863	1.1881	1.2966	30.1	39.0
212	1.1847	1.2364	1.2028	1.1489	1.1932	29.3	35.0
213	1.0951	1.1984	1.1504	1.1294	1.1433	22.7	25.9

Site ID	Annualisation Factor Leeds Centre	Annualisation Factor Dewsbury Ashworth Grange	Annualisation Factor Manchester Picadilly	Annualisation Factor Bradford Mayo Avenue	Average Annualisation Factor	Raw Data Time Weighted Annual Mean ($\mu\text{g}/\text{m}^3$)	Annualised Data Time Weighted Annual Mean ($\mu\text{g}/\text{m}^3$)
214	1.1419	1.2220	1.1872	1.1603	1.1779	23.8	28.0
215	1.1419	1.2220	1.1872	1.1603	1.1779	25.4	29.9
216	1.1419	1.2220	1.1872	1.1603	1.1779	29.0	34.2
217	1.1419	1.2220	1.1872	1.1603	1.1779	24.8	29.2
218	1.1419	1.2220	1.1872	1.1603	1.1779	24.6	29.0
219	1.1419	1.2220	1.1872	1.1603	1.1779	23.1	27.2
220	1.1419	1.2220	1.1872	1.1603	1.1779	25.9	30.5
221	1.0805	1.1714	1.1388	1.1180	1.1272	26.7	30.0
222	1.1635	1.2515	1.1917	1.1642	1.1927	29.1	34.7
223	1.2241	1.3132	1.2635	1.1899	1.2477	23.4	29.2
224	1.1419	1.2220	1.1872	1.1603	1.1779	27.3	32.2
225	1.1419	1.2220	1.1872	1.1603	1.1779	26.1	30.7
226	1.0492	1.1163	1.1222	1.1340	1.1054	30.0	33.1
227	1.0259	1.1242	1.1183	1.1520	1.1051	25.8	28.5

Diffusion tube bias adjustment factors

The diffusion tube data presented within the 2025 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/NO_2 continuous analysers. Alternatively, the national database of diffusion tube co-location surveys provides bias factors for the relevant laboratory and preparation method.

Kirklees Council have applied a national bias adjustment factor of 0.92 to the 2025 monitoring data, as no data are available from local monitoring to calculate a local bias adjustment, due to the cessation of the monitoring in 2023 at the Council's roadside monitoring stations. The national bias adjustment factor of 0.92 applied to the 2025 data was taken from the National Diffusion Tube Bias Adjustment Factor Spreadsheet v03/26 for Gradko, 50% TEA in acetone method¹⁰.

A summary of bias adjustment factors used by Kirklees 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 – Gradko	06/26	0.92
2024	National – Gradko	04/25	0.88
2023	National – SOCOTEC	03/23	0.77
2022	National – SOCOTEC	03/23	0.76
2021	National - SOCOTEC	04/22	0.78

Figure C.1 – National Bias Adjustment Factor Spreadsheet (03/26)

National Diffusion Tube Bias Adjustment Factor Spreadsheet						Spreadsheet Version Number: 03/26					
Follow the steps below <u>in the correct order</u> to show the results of <u>relevant</u> 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 ³ 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 ⁴ . If uncertain what to do then contact the Local Air Quality Management Helpdesk at LAQMHelpdesk@bureauveritas.com or 0800 0327953							
Analysed By ¹		Method <small>To make your selection, choose (All) from the pop-up list</small>	Year ⁵ <small>To make your selection, choose (All)</small>	Site Type	Local Authority	Length of Study (months)	Diffusion Tube Mean Conc. (Dm) (µg/m³)	Automatic Monitor Mean Conc. (Cm) (µg/m³)	Bias (B)	Tube Precision ⁶	Bias Adjustment Factor (A) (Cm/Dm)
Gradko		50% TEA in acetone	2025	UB	City Of London Corporation	12	24	22	8.4%	G	0.92
Gradko		50% TEA in acetone	2025	R	City Of London Corporation	12	31	28	9.8%	G	0.91
Gradko		50% TEA in acetone	2025	R	Lb Hounslow	10	31	25	22.1%	G	0.82
Gradko		50% TEA in Acetone	2025	UC	Falkirk Council	11	27	25	6.1%	G	0.94
Gradko		50% TEA in Acetone	2025	UB	Falkirk Council	11	11	15	-22.6%	G	1.29
Gradko		50% TEA in acetone	2025	KS	Marylebone Road Intercomparison	12	37	31	17.7%	G	0.85
Gradko		50% TEA in acetone	2025	SU	Redcar And Cleveland Borough Council	12	11	9	29.0%	G	0.78
Gradko		50% TEA in Acetone	2025	R	London Borough Of Merton	12	27	22	22.7%	G	0.81
Gradko		50% TEA in acetone	2025	UB	London Borough Of Wandsworth	12	20	18	9.0%	G	0.92
Gradko		50% TEA in acetone	2025	R	London Borough Of Richmond Upon Thames	12	15	18	-17.8%	G	1.22
Gradko		50% TEA in acetone	2025	KS	London Borough Of Richmond Upon Thames	10	30	26	15.9%	G	0.86
Gradko		50% TEA in acetone	2025	B	London Borough Of Richmond Upon Thames	12	13	13	1.5%	G	0.99
Gradko		50% TEA in acetone	2025	R	Sandwell Mbc	11	28	24	16.6%	G	0.86
Gradko		50% TEA in acetone	2025	UB	Sandwell Mbc	11	19	20	-5.2%	G	1.05
Gradko		50% TEA in acetone	2025	UB	City Of York Council	12	13	12	13.4%	G	0.88
Gradko		50% TEA in acetone	2025	R	City Of York Council	12	20	19	6.6%	G	0.94
Gradko		50% TEA in acetone	2025	R	City Of York Council	10	16	15	7.0%	G	0.93
Gradko		50% TEA in acetone	2025	R	City Of York Council	11	21	18	18.1%	G	0.85
Gradko		50% TEA in acetone	2025		Overall Factor ³ (18 studies)				Use		0.92

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 (v6.1)¹². Distance correction should be considered at any monitoring site where the annual mean concentration is greater than 36 µg/m³ and the monitoring site is not located at a point of relevant exposure (taking the limitations of the calculator into account).

Where appropriate, non-automatic annual mean NO₂ concentrations corrected for distance are presented in Table C.3.

The calculation of NO₂ fall-off with distance from the road requires the use of a local background NO₂ concentration to derive concentrations at relevant exposure locations. For the 2025 assessment, Defra background maps (1 km grid square data)¹³ were used to define background concentrations and were applied consistently across all calculations of NO₂ fall-off with distance from the road.

¹² Defra - *Diffusion Tube Data Processing Tool*, available at: <https://laqm.defra.gov.uk/air-quality/air-quality-assessment/diffusion-tube-data-processing-tool/>

¹³ Defra - *Local Air Quality Management (LAQM) background maps*, available at: <https://uk-air.defra.gov.uk/data/laqm-background-home>

Table C.3 – Non-automatic NO₂ fall off with distance calculations (concentrations presented in microgrammes per cubic metre)

Site ID	Distance (m): monitoring site to kerb	Distance (m): receptor to kerb	Monitored concentration (µg/m ³), annualised and bias adjusted	Background concentration (µg/m ³)	Concentration predicted at receptor (µg/m ³)	Comments
40	1.6	2.8	38.7	19.0	36.3	Predicted concentration at Receptor within 10% the AQS objective.
77	2.2	3.4	37.1	11.0	34.3	
144	3.7	5.1	41.5	15.2	39.2	Predicted concentration at Receptor within 10% the AQS objective.
145	3.2	5.3	44.3	15.2	40.4	Predicted concentration at Receptor above AQS objective.
151	2.3	35.4	38.9	11.0	20.5	
164	1.6	2.8	38.9	19.0	36.5	Predicted concentration at Receptor within 10% the AQS objective.
165	1.6	2.8	39.3	19.0	36.8	Predicted concentration at Receptor within 10% the AQS objective.
168	2.2	3.4	36.9	11.0	34.2	
169	2.2	3.4	38.2	11.0	35.4	

Site ID	Distance (m): monitoring site to kerb	Distance (m): receptor to kerb	Monitored concentration ($\mu\text{g}/\text{m}^3$), annualised and bias adjusted	Background concentration ($\mu\text{g}/\text{m}^3$)	Concentration predicted at receptor ($\mu\text{g}/\text{m}^3$)	Comments
183	3.2	5.3	44.9	15.2	41.0	Predicted concentration at Receptor above AQS objective.
184	3.2	5.3	41.9	15.2	38.3	Predicted concentration at Receptor within 10% the AQS objective.
211	2.0	5.9	37.3	15.2	33.2	Predicted concentration at Receptor within 10% the AQS objective.

QA/QC of automatic monitoring

In terms of the automatic monitoring, the only automatic site currently operational in Kirklees is CM1 Dewsbury Ashworth Grange. This urban background site forms part of the Automatic Urban Monitoring Network (AURN). It currently monitors NO_x, NO₂, PM₁₀, PM_{2.5}, and O₃.

The AURN is the UK's largest automatic monitoring network and is the main network used for compliance reporting against the Ambient Air Quality objectives. A number of organisations are involved in the day-to-day running of the network. Currently, the site is operated by Bureau Veritas. The frequency of calibrations, audit and servicing will therefore be following AURN QA/QC procedures. Calibration gases for the network are supplied by BOC Limited and are provided with a UKAS certificate of calibration by Ricardo Energy & Environment.

Live and historic data for this site is accessible via Defra's UK AIR website. The data presented in this report has been validated and fully ratified by Defra's current contractor, following AURN QA/QC procedures.

PM₁₀ and PM_{2.5} monitoring adjustment

A FIDAS monitor is used to monitor PM₁₀ and PM_{2.5} at CM1 Dewsbury Ashworth Grange AURN site. As discussed above, we have only reported ratified AURN data within this ASR, so any monitoring adjustment will have been undertaken nationally as part of the AURN data ratification process.

Automatic monitoring annualisation

Annualisation was not required for 2025 AURN data from Dewsbury Ashworth Grange. The data we reported for 2025 (NO₂, PM₁₀ and PM_{2.5}) had annual data capture rates of 89.4 %, 99.9 % and 99.9 % respectively, therefore it was not required to annualise any monitoring data.

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 NO₂ fall-off with distance calculator available on the LAQM Support website. Where appropriate, automatic annual mean NO₂ concentrations corrected for distance are presented in Table A.3.

This has not been calculated for the AURN continuous monitoring station Dewsbury Ashworth Grange, as this is an urban background monitoring station, and the annual mean concentration is below 10% of the annual mean concentration limit for NO₂. Table C.5 – Automatic NO₂ Fall off With Distance Calculations (concentrations in µg/m³) has therefore been removed.

Appendix D: Map(s) of monitoring locations and AQMAs

Maps of monitoring locations and the 7 AQMAs and surrounding monitoring areas within Kirklees have been provided. These maps show the latest configuration of monitoring sites by Kirklees Council.

Figure D.1 – Ainley Top (AQMA 3) and Nearby Diffusion Tube monitoring sites

Ainley Top (AQMA 3) and Nearby Diffusion Tubes

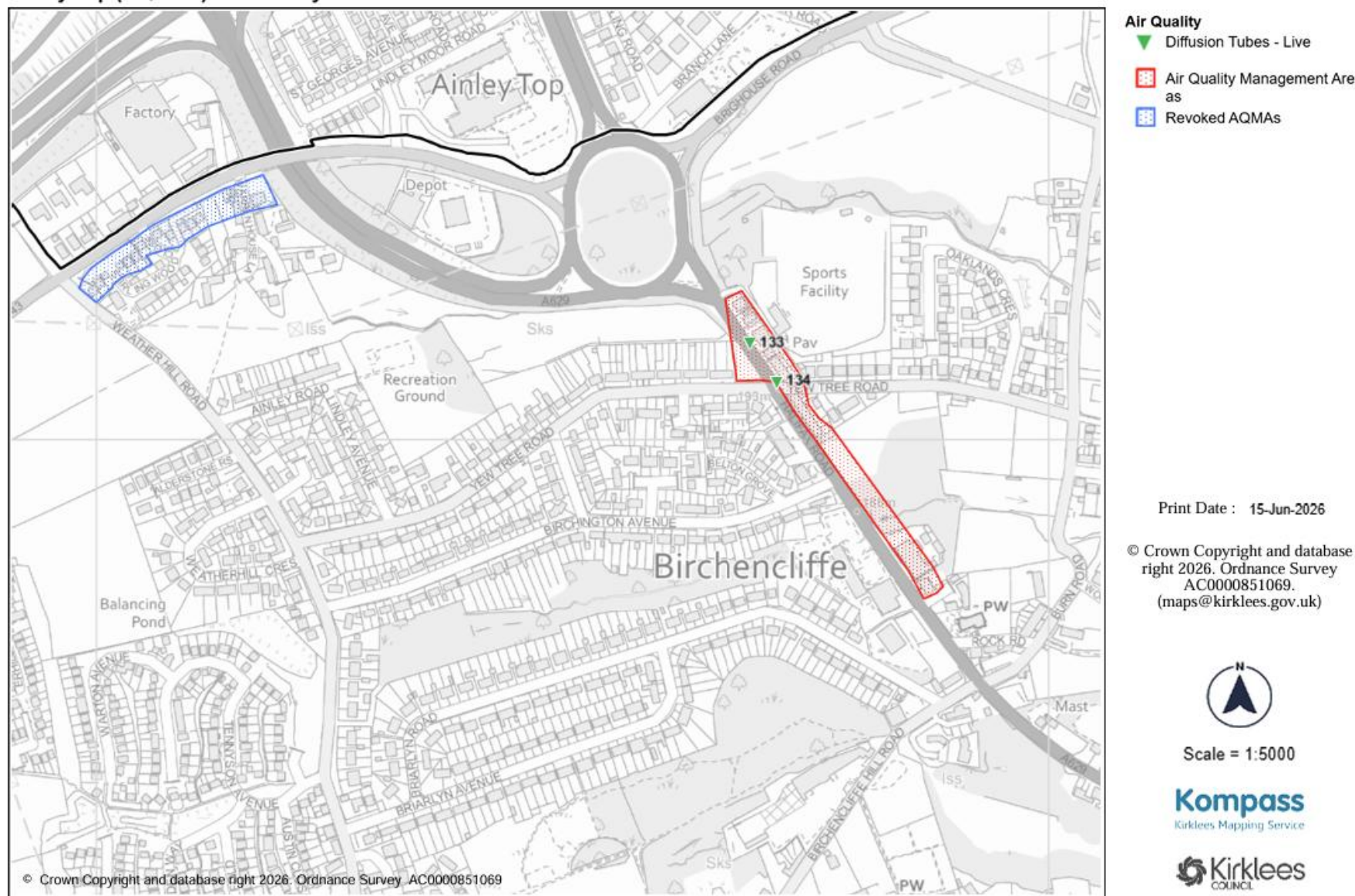


Figure D.1 shows the Air Quality Management Area at Ainley Top (AQMA 3) and diffusion tube monitoring sites. The AQMA boundary is shown in red and diffusion tubes monitoring sites are shown in green. The former area of AQMA 3 at Lindley Moor, amended in 2025, is also shown in blue.

Figure D.2 – Eastborough (AQMA 5) and Nearby Diffusion Tube monitoring sites

Eastborough, Dewsbury (AQMA 5) and Nearby Diffusion Tubes

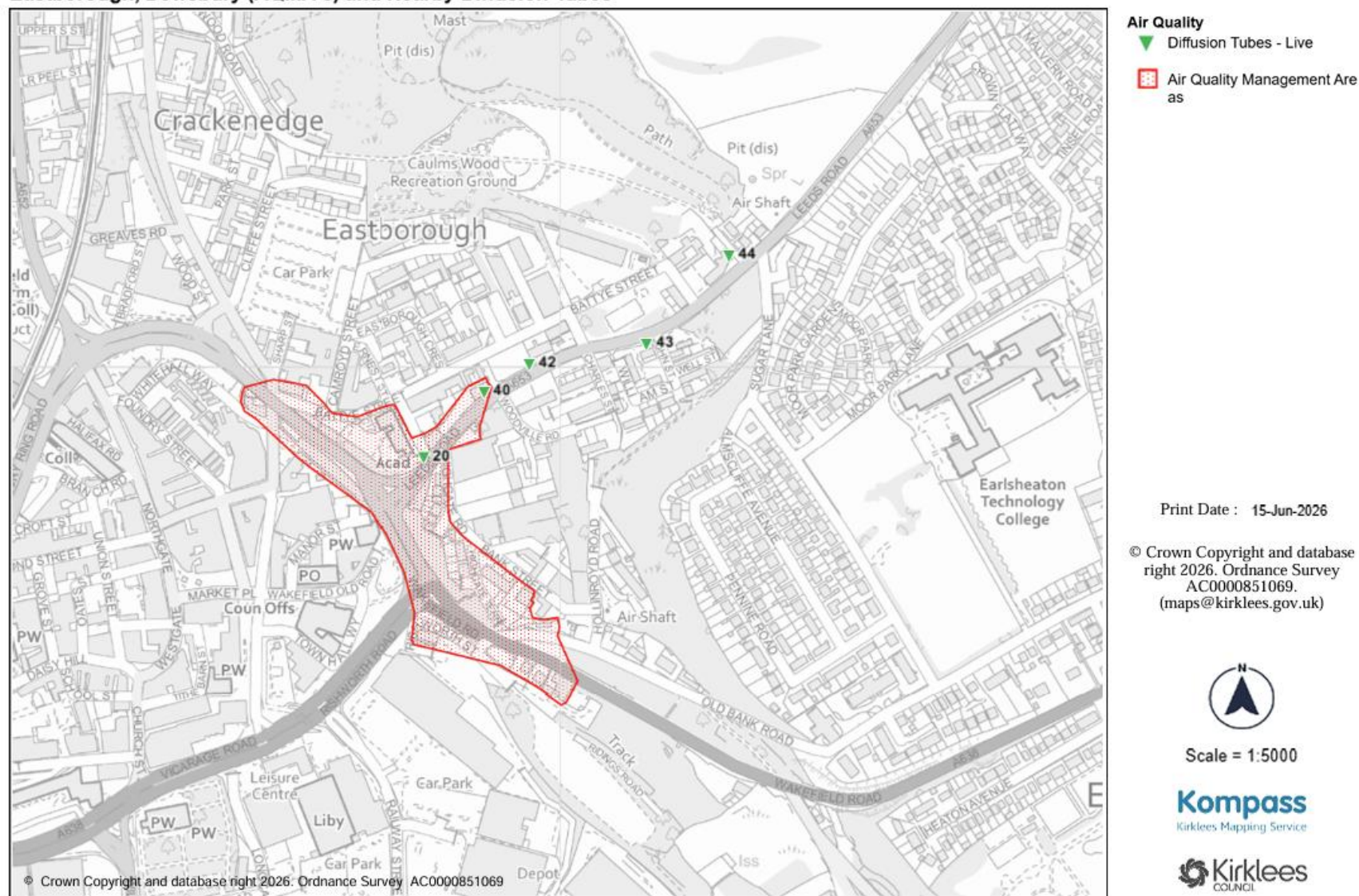


Figure D.2 shows the Air Quality Management Area at Eastborough (AQMA 5) and diffusion tube monitoring sites. The AQMA boundary is shown in red and diffusion tubes monitoring sites are shown in green.

Figure D.3 – Edgerton (AQMA 6) and Nearby Diffusion Tube monitoring sites

Edgerton (AQMA 6) and Nearby Diffusion Tubes



Figure D.3 shows the Air Quality Management Area at Edgerton (AQMA 6) and diffusion tube monitoring sites. The AQMA boundary is shown in red and diffusion tubes monitoring sites are shown in green.

Figure D.4 – Liversedge (AQMA 7) and Nearby Diffusion Tube monitoring sites

Liversedge (AQMA 7) and Nearby Diffusion Tubes

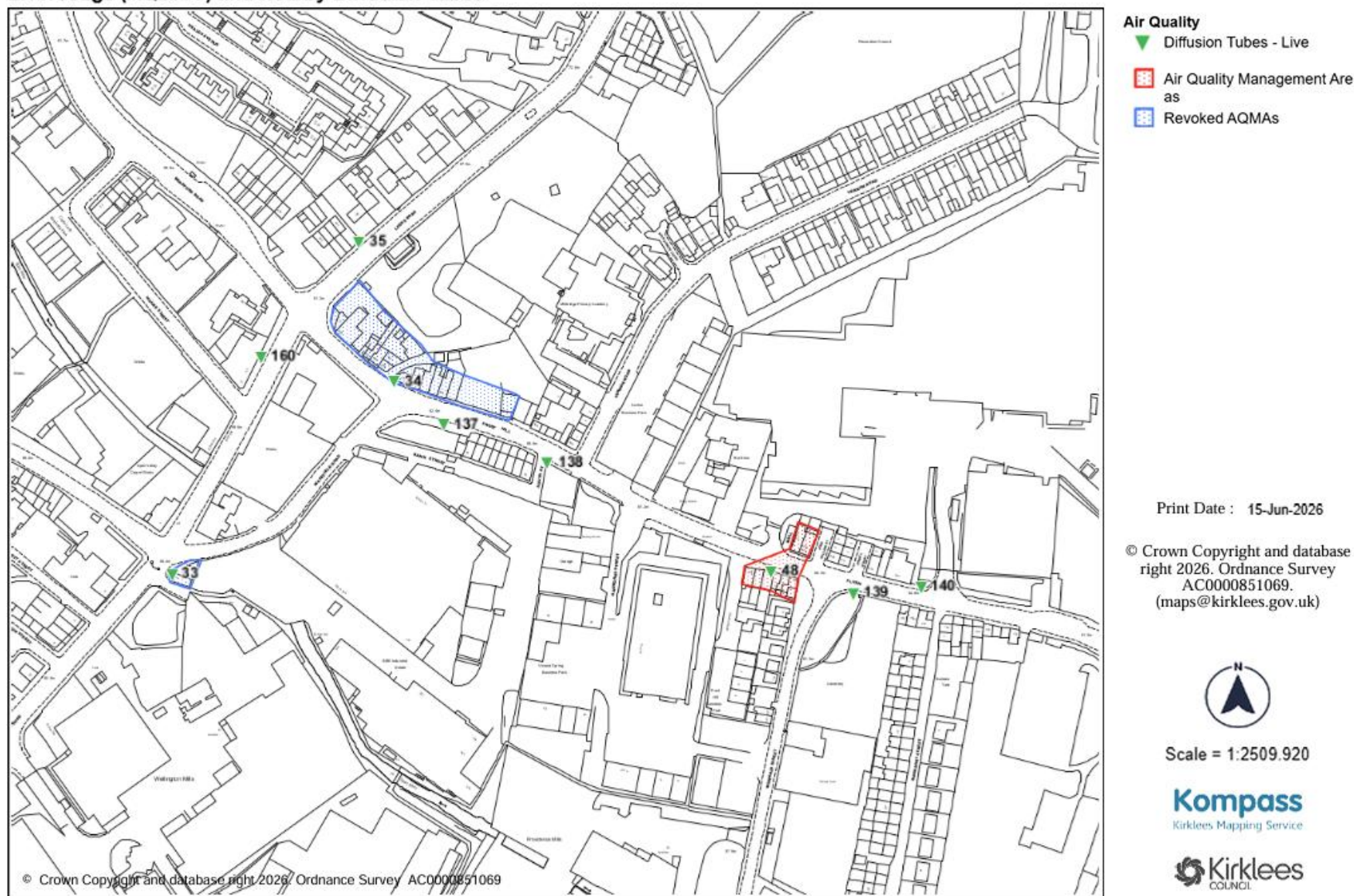


Figure D.4 shows the Air Quality Management Area at Liversedge (AQMA 7) and diffusion tube monitoring sites. The AQMA boundary is shown in red and diffusion tubes monitoring sites are shown in green. The former areas of AQMA 7 at Liversedge, amended in 2025, is also shown in blue.

Figure D.5 – Outlane (AQMA 8) and Nearby Diffusion Tube monitoring sites

Outlane (AQMA 8) and Nearby Diffusion Tubes

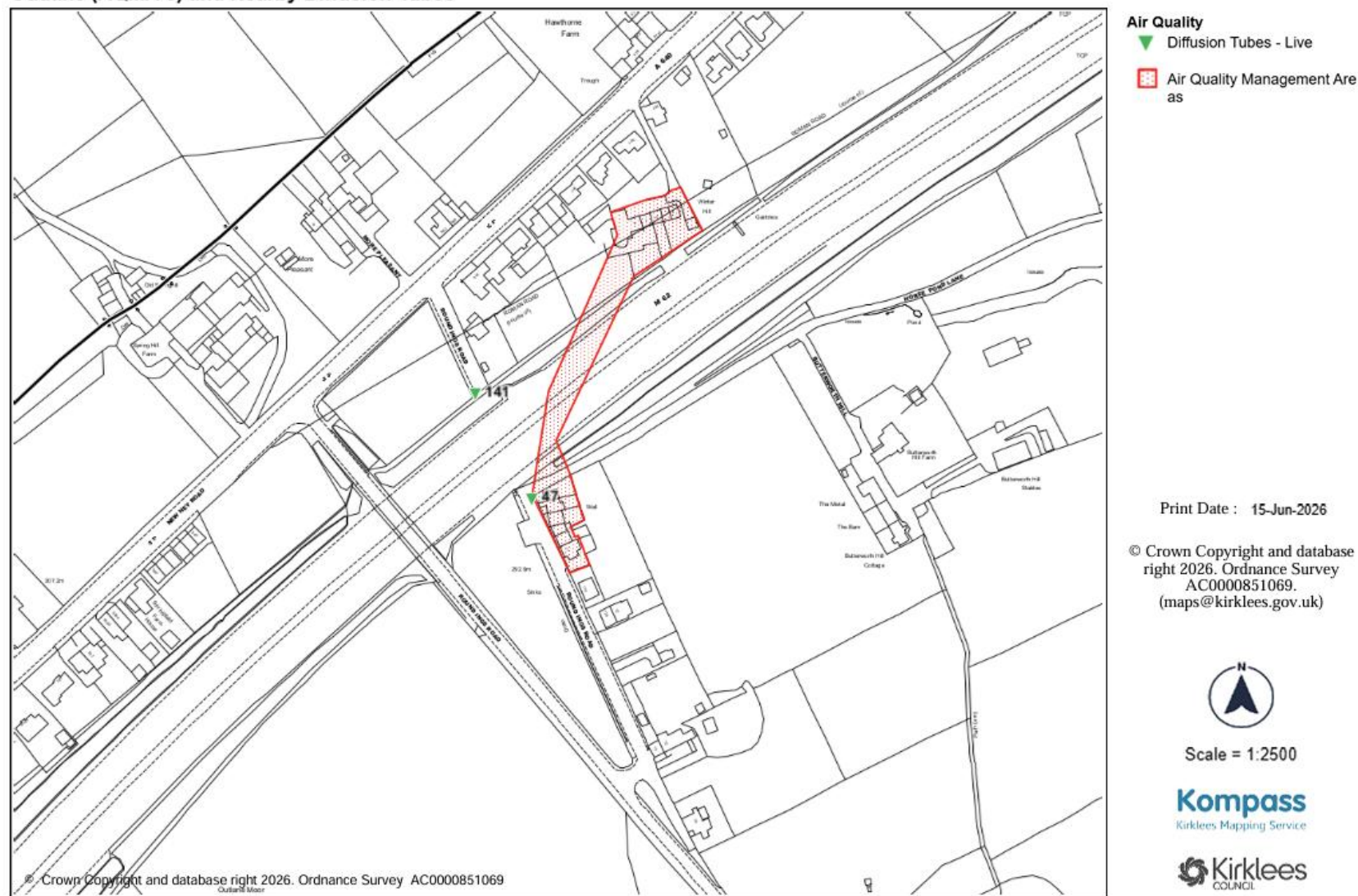


Figure D.5 shows the Air Quality Management Area at Outlane (AQMA 8) and diffusion tube monitoring sites. The AQMA boundary is shown in red and diffusion tubes monitoring sites are shown in green.

Figure D.6 – Huddersfield Town Centre (AQMA 9) and Nearby Diffusion Tube monitoring sites

Huddersfield Town Centre (AQMA 9) and Nearby Diffusion Tubes

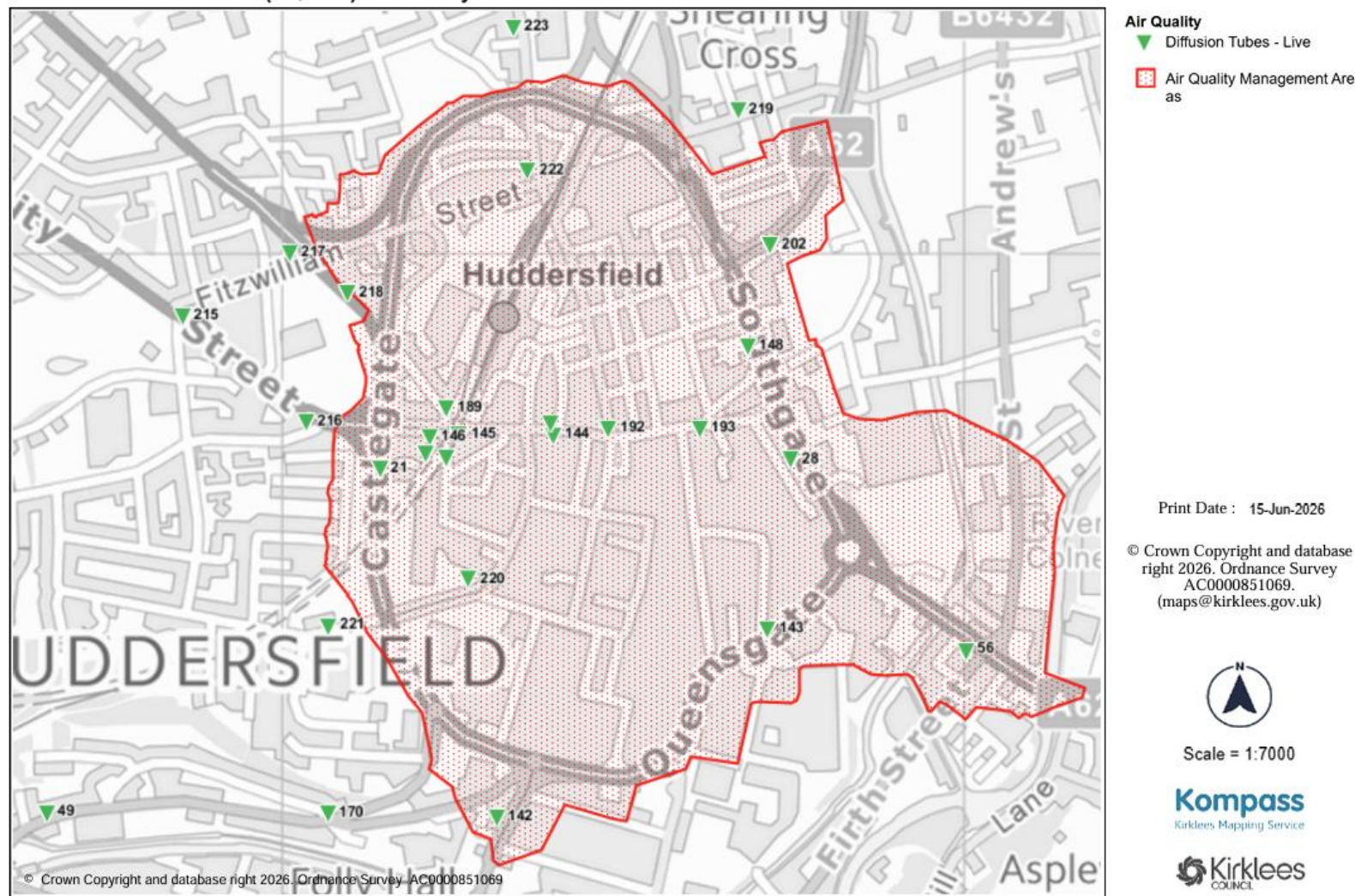


Figure D.6 shows the Air Quality Management Area at Huddersfield (AQMA 9) and diffusion tube monitoring sites. The AQMA boundary is shown in red and diffusion tubes monitoring sites are shown in green.

Figure D.7 – Thornton Lodge (AQMA 10) and Nearby Diffusion Tube monitoring sites

Thornton Lodge (AQMA 10) and Nearby Diffusion Tubes

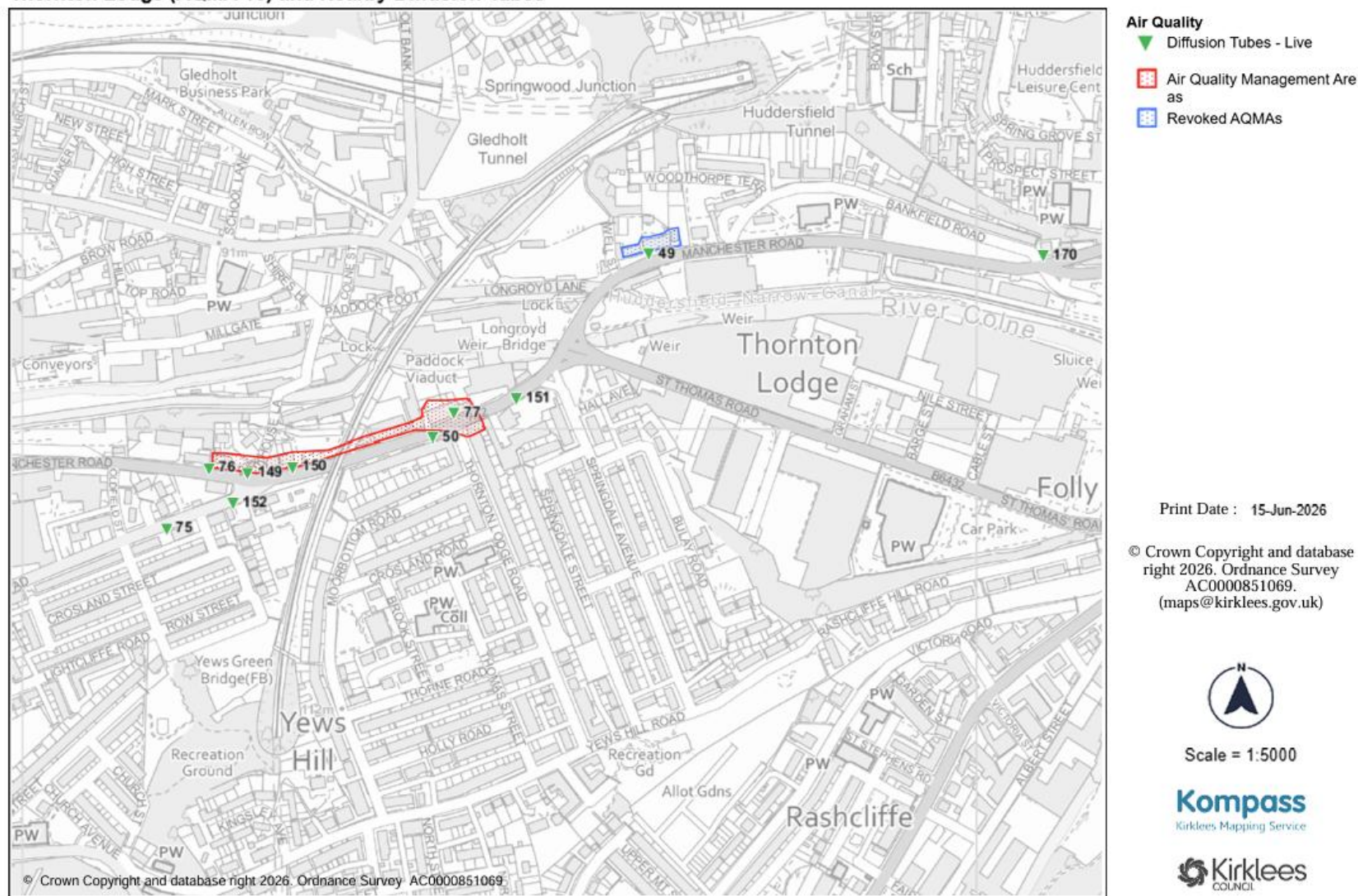


Figure D.7 shows the Air Quality Management Area at Thornton Lodge (AQMA 10) and diffusion tube monitoring sites. The AQMA boundary is shown in red and diffusion tubes monitoring sites are shown in green. The former area of AQMA 10 at Thornton Lodge, amended in 2025, is also shown in blue.

Figure D.8 – Diffusion tube monitoring sites at Bradley, Huddersfield

Bradley Diffusion Tubes

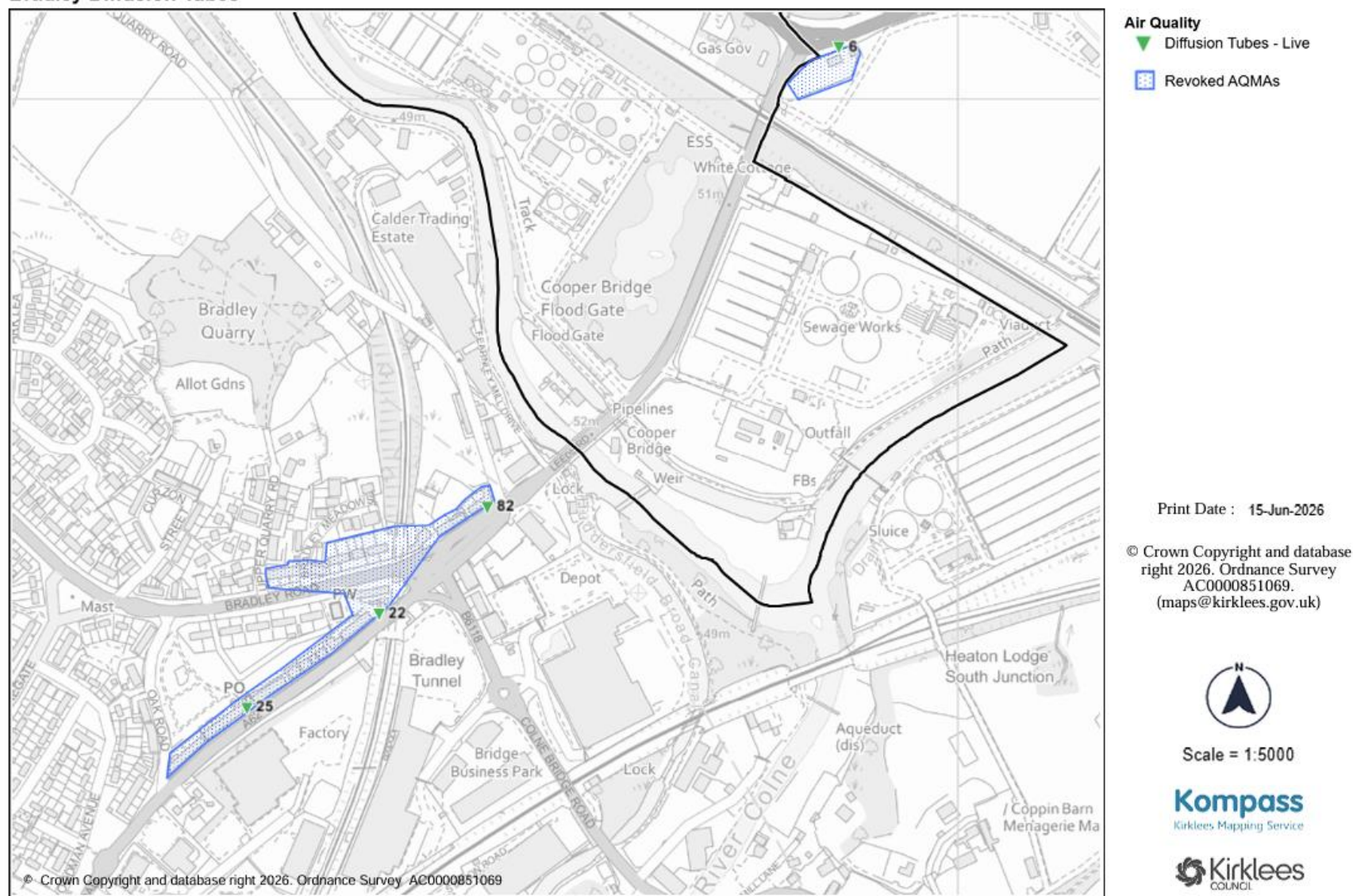
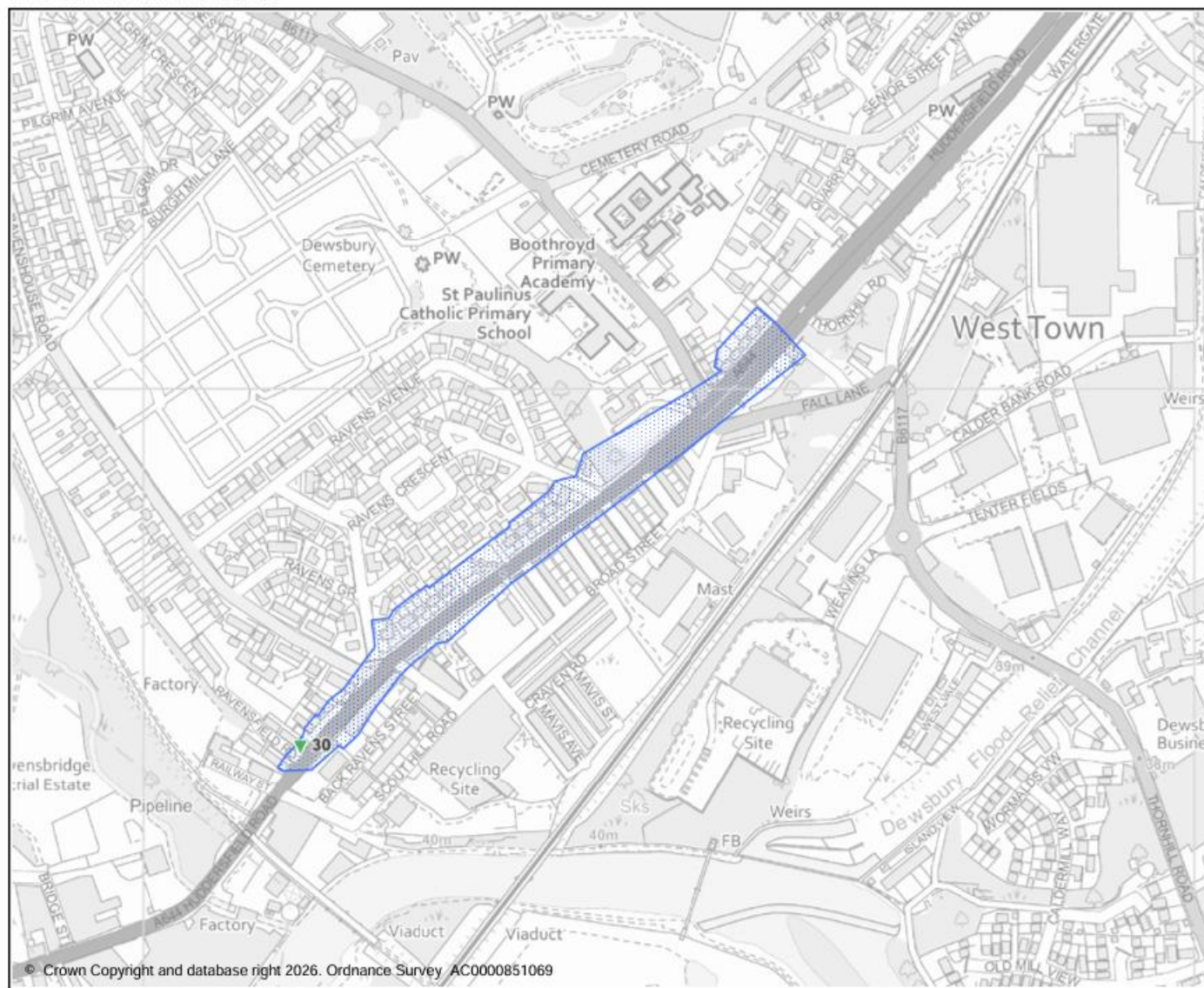


Figure D.8 shows the diffusion tube monitoring sites at Bradley, Huddersfield. Diffusion tubes monitoring sites are shown in green. The former area of AQMA 1 at Cooper Bridge, revoked in 2025, is also shown in blue.

Figure D.9 – Diffusion tube monitoring sites at Bradley, Huddersfield

Scouthill Diffusion Tubes



Air Quality

- ▼ Diffusion Tubes - Live
- Revoked AQMA

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Scale = 1:5000

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Figure D.9 shows the diffusion tube monitoring site at Scouthill. The diffusion tubes monitoring site is shown in green. The former area of AQMA 2 at Scouthill revoked in 2025, is also shown in blue.

Figure D.10 – Diffusion tube monitoring sites at Ravensthorpe

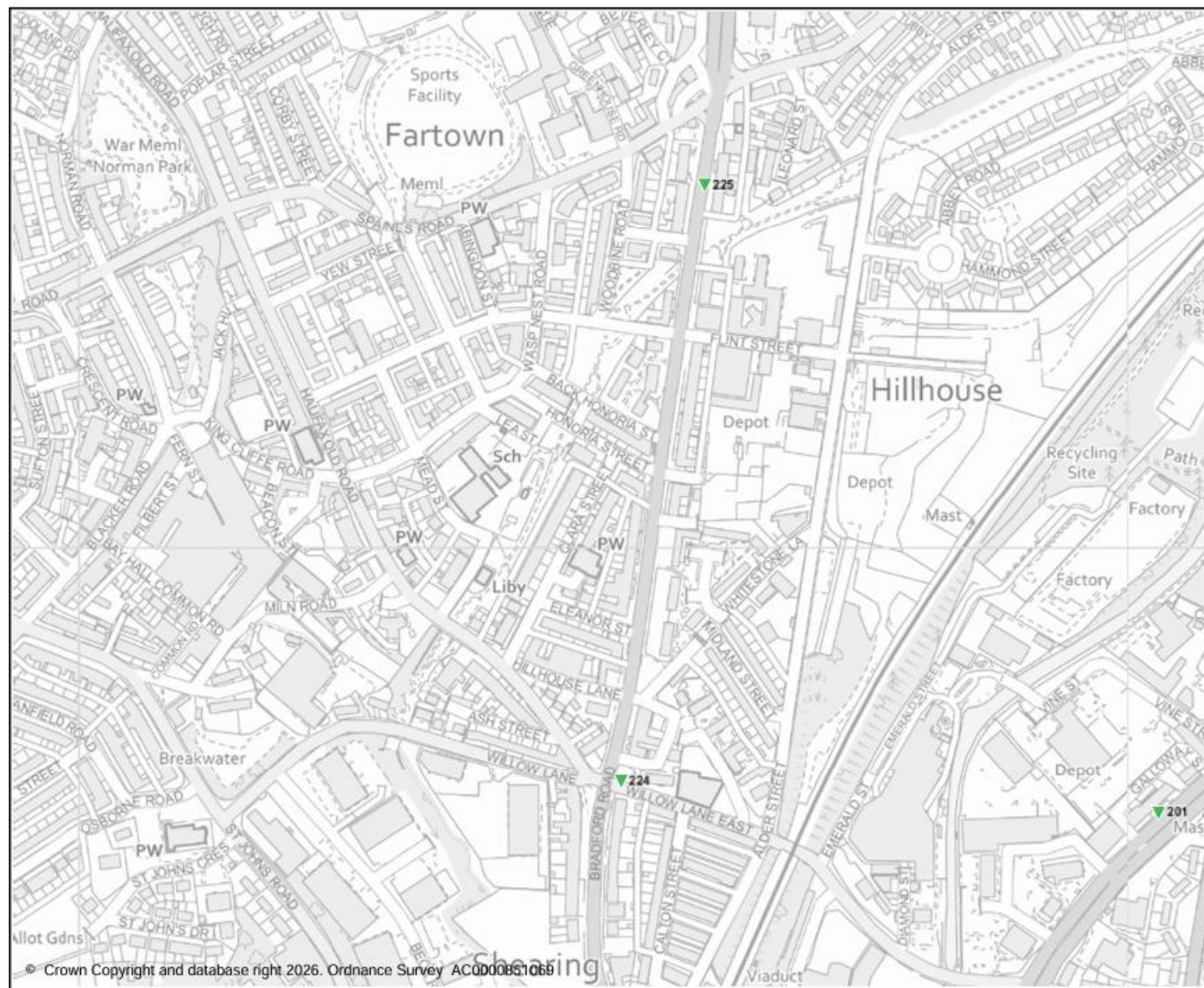
Ravensthorpe Diffusion Tubes



Figure D.10 shows the diffusion tube monitoring site at Ravensthorpe. Diffusion tubes monitoring sites are shown in green.

Figure D.11 – Diffusion tube monitoring sites at Fartown

Bradford Road Diffusion Tubes



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Scale = 1:5000

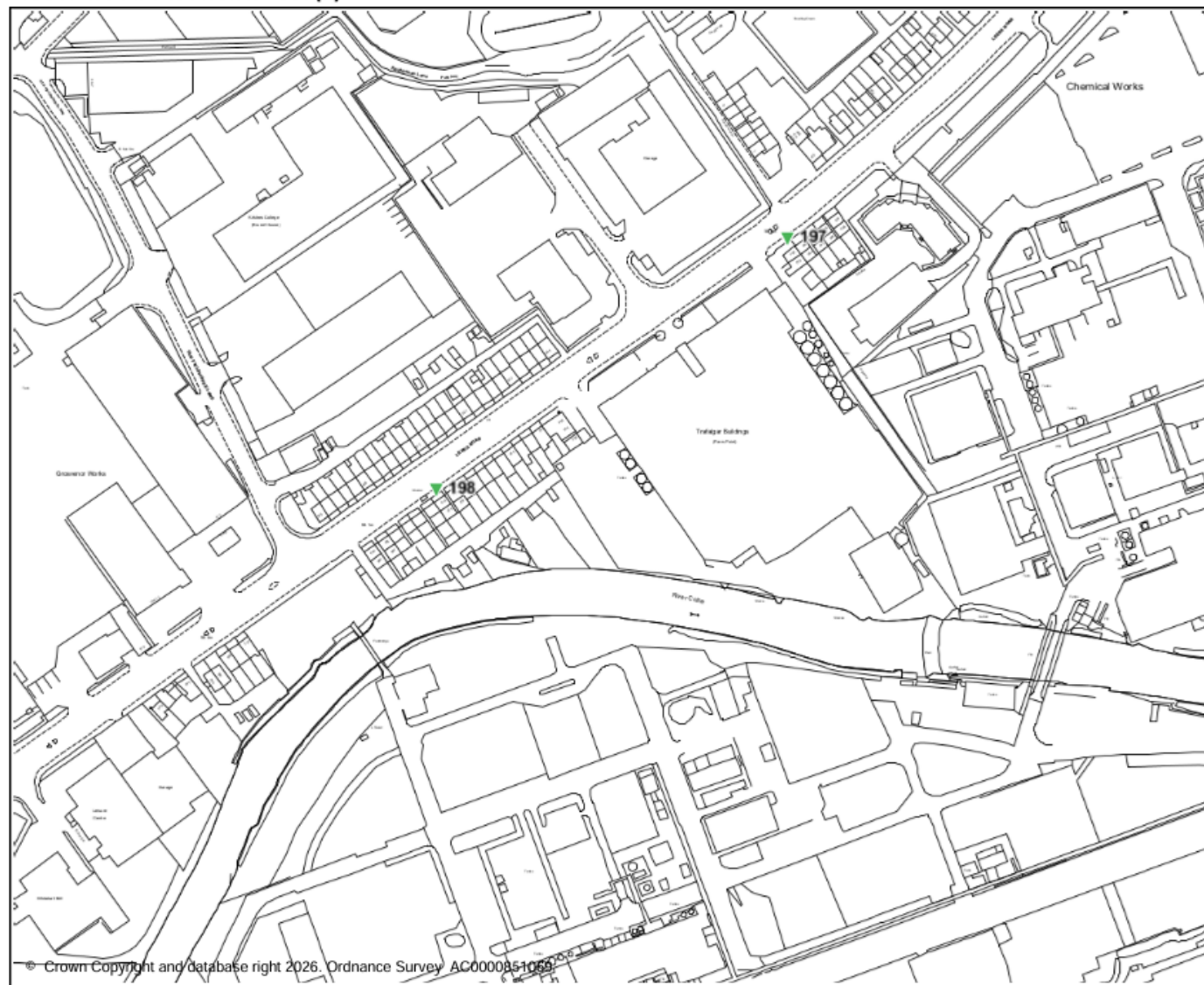
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Figure D.11 shows the diffusion tube monitoring sites at Bradford Road, Fartown. Diffusion tubes monitoring sites are shown in green.

Figure D.12 – Diffusion tube monitoring sites on Leeds Road, Huddersfield (1)

Leeds Road Diffusion Tubes (1)



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Figure D.12 shows the two diffusion tube monitoring sites on a section of Leeds Road, Huddersfield. Diffusion tubes monitoring sites are shown in green.

Figure D.13 – Diffusion tube monitoring sites on Leeds Road, Huddersfield (2)

Leeds Road Diffusion Tubes (2)

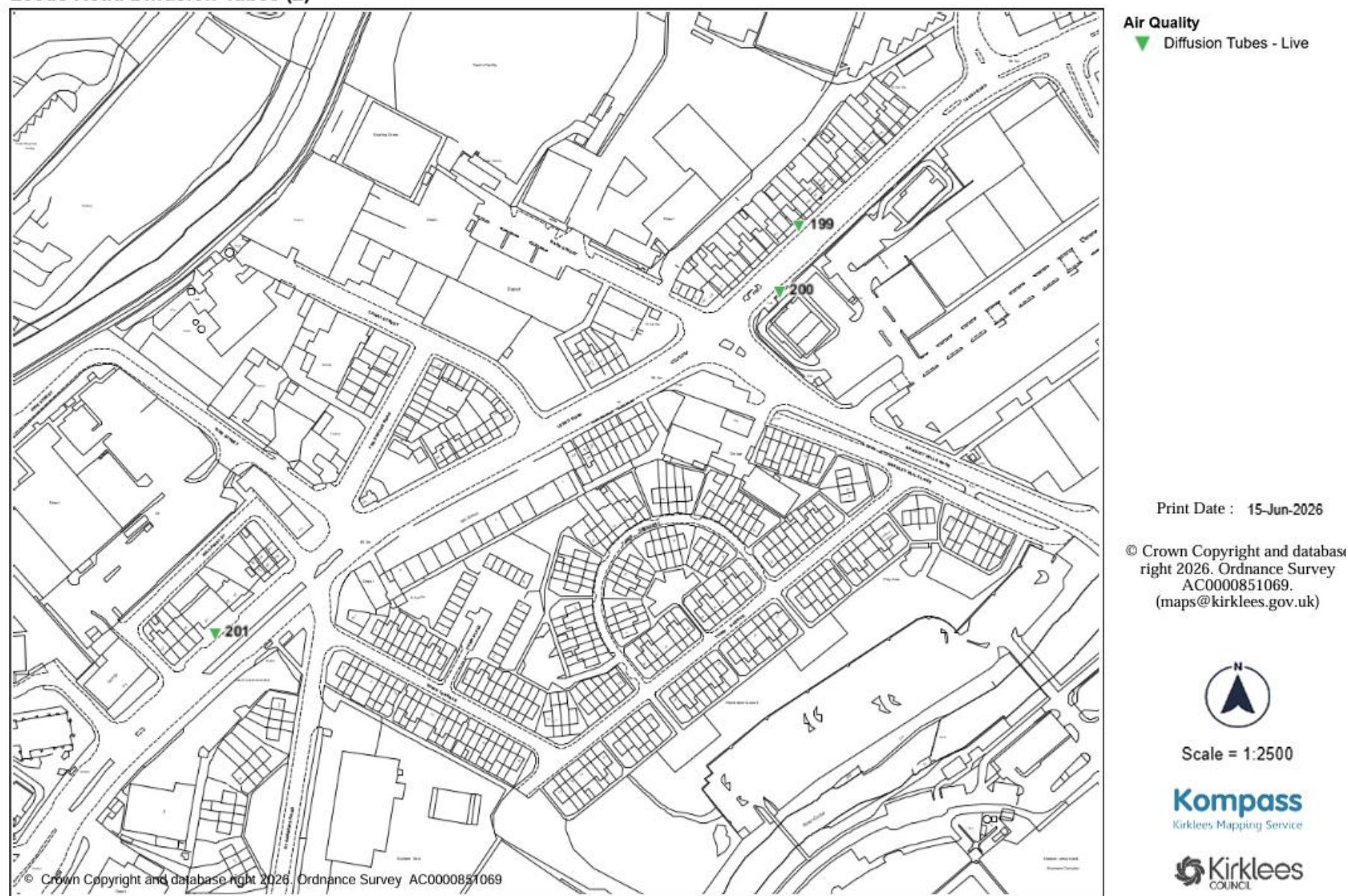


Figure D.13 shows three diffusion tube monitoring sites on a section of Leeds Road, Huddersfield. Diffusion tubes monitoring sites are shown in green.

Figure D.14 – Diffusion tube monitoring sites on Crosland Moor, Huddersfield

Crosland Moor Diffusion Tubes



Figure D.14 shows diffusion tube monitoring sites at Crosland Moor, Huddersfield. Diffusion tubes monitoring sites are shown in green.

Figure D.15 – Diffusion tube monitoring sites at Lockwood

Lockwood Diffusion Tubes

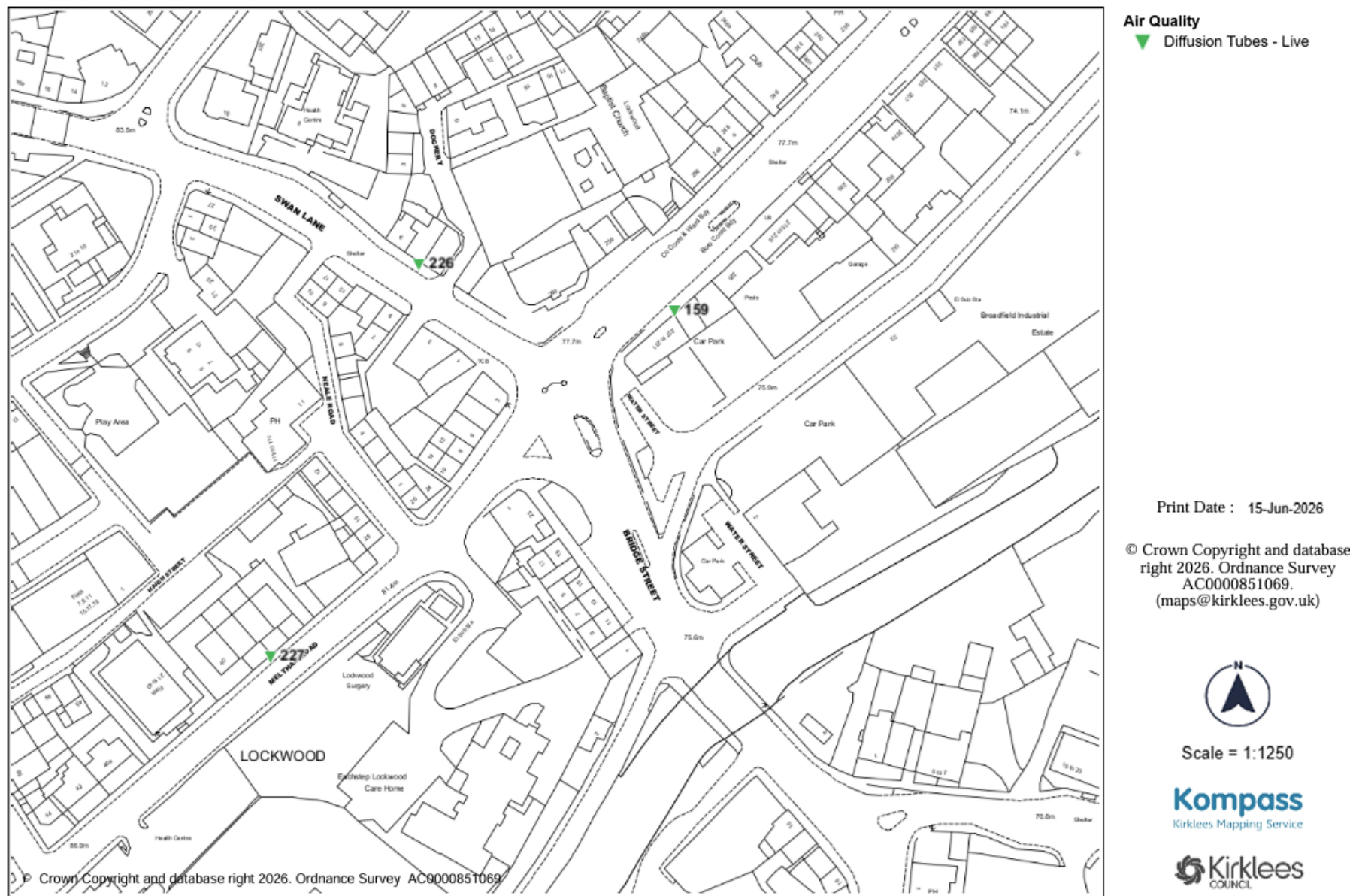


Figure D.15 shows diffusion tube monitoring sites at Lockwood. Diffusion tubes monitoring sites are shown in green

Figure D.16 – Diffusion tube monitoring sites at Batley

Batley Diffusion Tubes

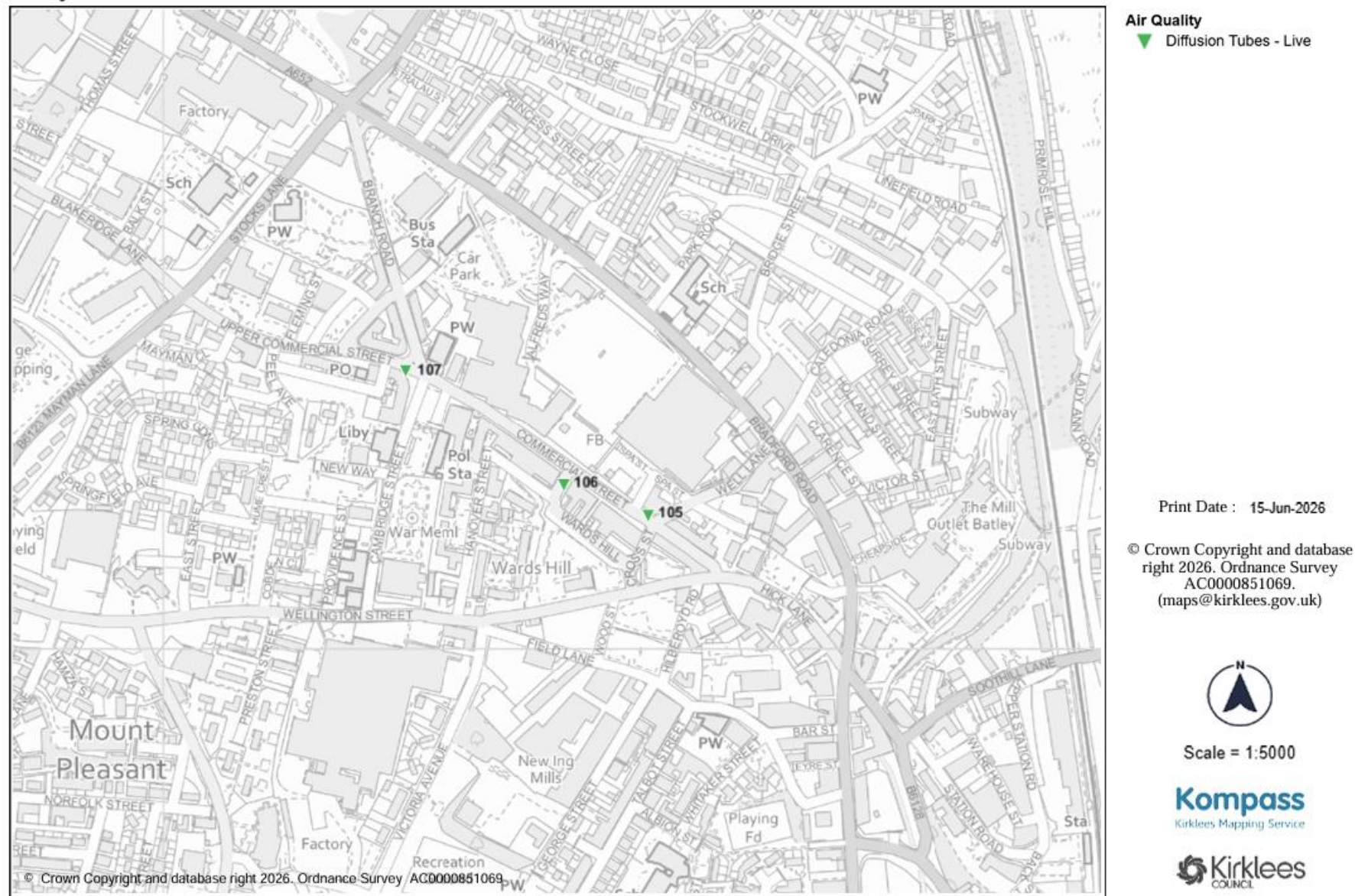
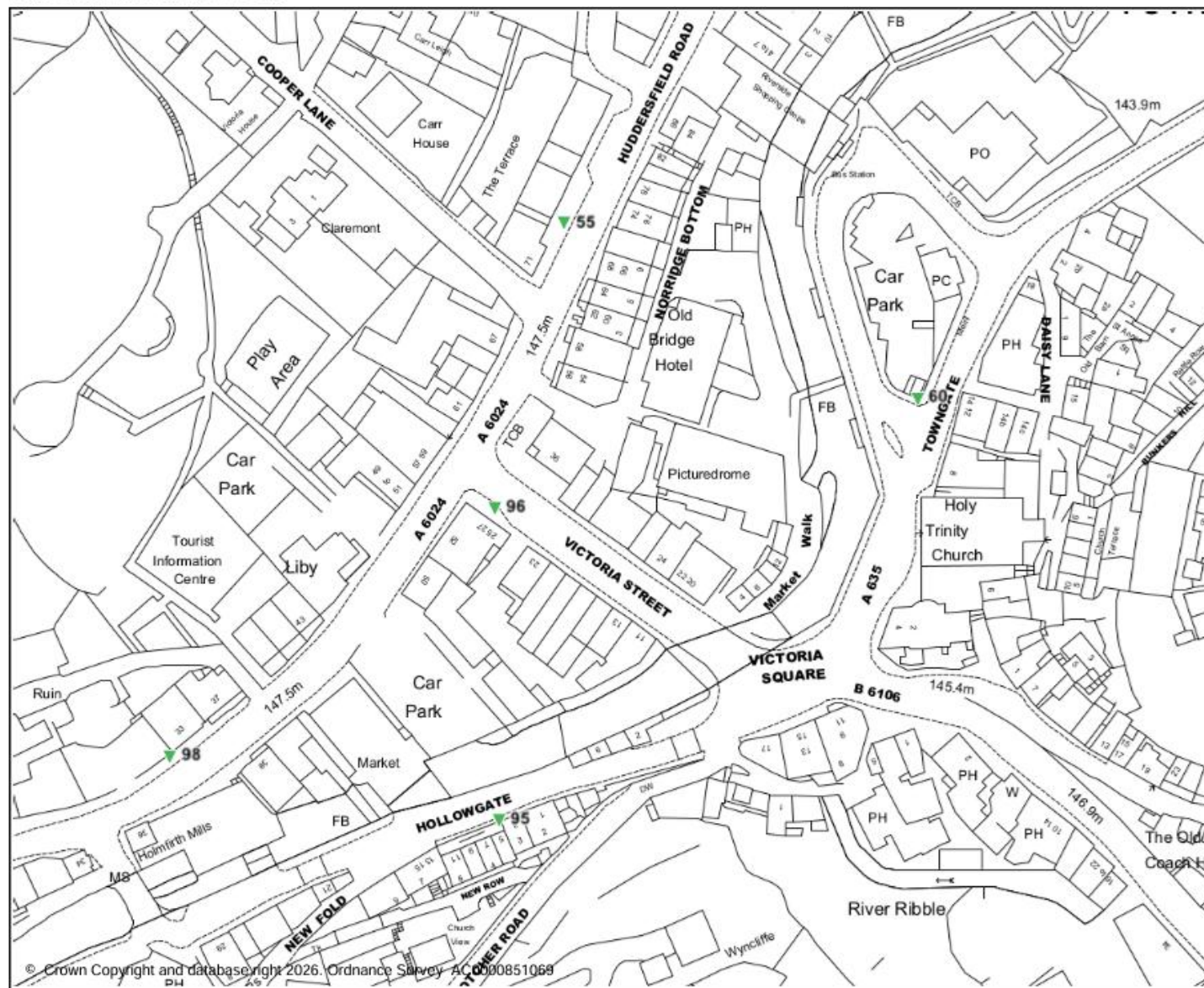


Figure D.16 shows diffusion tube monitoring sites at Batley. Diffusion tubes monitoring sites are shown in green

Figure D.17 – Diffusion tube monitoring sites at Holmfirth

Holmfirth Diffusion Tubes



Air Quality

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Figure D.17 shows diffusion tube monitoring sites at Holmfirth. Diffusion tubes monitoring sites are shown in green

Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England¹⁴

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

¹⁴ 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
AQD	Air Quality Directive
ASR	Air Quality Annual Status Report - submitted annual to DEFRA in fulfilment of Part IV of the Environment Act 1995 Local Air Quality Management, as amended by the Environment Act 2021
AURN	Automatic Urban and Rural Network – the UK wide continuous air quality monitoring network, administered by Defra
CCAP	Climate change Action Plan
CRSTS	City Regional Sustainable Transport Settlement - Funding programme for sustainable transport.
Defra	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
DT	Diffusion Tube
EIP	Environmental Improvement Plan
EV	Electric Vehicle
FIDAS	Fine Dust Analysis System
KMC	Kirklees Metropolitan Council
KJSA	Kirklees Joint Strategic Assessment (KJSA)
KPI	Key Performance Indicator
LAEP	Local Area Energy Plan
LAQM	Local Air Quality Management
LAQM.PG(22)	Local Air Quality Management Policy Guidance 2022 - Provides policy guidance to local authorities on how to meet LAQM requirements

Abbreviation	Description
LAQM.TG(22)	Local Air Quality Management Technical Guidance 2022 - Provides detailed technical guidance on monitoring, modelling and assessment of air quality
LEVI	Local Electric Vehicle Infrastructure
LTP4	Local Transport Plan 4 - Regional transport strategy guiding investment and emissions reduction
MOVA	Microprocessor Optimised Vehicle Actuation - Traffic signal system improving junction efficiency
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
O ₃	Ozone
PHE	Public Health England
PHEV	Plug-in Hybrid Electric Vehicle
PIIP	West Yorkshire Public Particulate Information Improvement Project (PIIP)
PM ₁₀	Airborne particulate matter with an aerodynamic diameter of 10 µm (micrometres or microns) or less
PM _{2.5}	Airborne particulate matter with an aerodynamic diameter of 2.5 µm or less
QA/QC	Quality Assurance/Quality Control
Receptor	A location representative of human (or ecological) exposure to a pollutant, over a time period relevant to the objective that is being assessed against, where the Air Quality Strategy objectives are considered to apply
SO ₂	Sulphur dioxide
SoS	Secretary of State
TEA	Triethanolamine
TWAO	Transport and Works Act Order
TRU	Transpennine Route Upgrade
UKHSA	The UK Health Security Agency
ULEVs	Ultra Low Emission Vehicles
UTC	Urban Traffic Control
UTMC	Urban Traffic Management Control
VRP	Vehicle Replacement Programme

Abbreviation	Description
WHO	World Health Organisation
WYCA	West Yorkshire Combined Authority
WYLES	West Yorkshire Low Emission Strategy
ZEBRA	Zero Emission Bus Regional Area
Zephyr	Real-time indicative air quality sensor

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