

<b>Subject:</b>	Annual Air Quality Report 2023	<b>Status:</b>	For Publication		
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## 1. RECOMMENDATION

1.1 That the contents of the report be noted.

## 2. EXECUTIVE SUMMARY

- The Annual Air Quality Report is a statutory requirement of the Authority.
- Two previous Air Quality Management Areas (AQMA) were revoked due to a successful reduction in the NO<sub>2</sub> to below government levels for over 3 years and a fast tract AQMA declared in December 2022.
- A general trend of reduction experienced across the sites.

## 3. BACKGROUND

- 3.1 Air pollution is associated with a number of adverse health impacts. It is recognised as a contributing factor in the onset of heart disease and cancer.
- 3.2 Additionally, air pollution particularly affects the most vulnerable in society: children, the elderly, and those with existing heart and lung conditions. There is also often a strong correlation with equalities issues because areas with poor air quality are also often less affluent areas.
- 3.3 The mortality burden of air pollution within the UK is equivalent to 29,000 to 43,000 deaths at typical ages with a total estimated healthcare cost to the NHS and social care of £157 million in 2017.
- 3.4 Approximately 80% of a persons health and wellbeing is determined by activities and circumstances in their home and community and not medical health interventions.
- 3.5 The main air quality concern in Rossendale continues to be Nitrogen Dioxide (NO<sub>2</sub>) caused by road traffic vehicles.
- 3.6 Every year an Annual Status Report is submitted to the Department for Environment, Food and Rural Affairs (DEFRA) detailing the current position regarding air quality within the Borough. A copy of this report is appended at **Appendix A**.

## 4. DETAILS

- 4.1 District Councils have responsibility for monitoring air quality. Where places are found to have pollution levels higher than the national air quality objectives the local authority must declare an Air Quality Management Area (AQMA) and then put together a plan to bring about improvements.
- 4.2 In the last year, a new AQMA was declared which comprises 13 residential properties between Gas Street and Holden Place numbered 240 to 268 Grane Road, Haslingden, BB4 4PB.
- 4.3 Partnership working is currently active in this area and an update will be provided in the next annual status report.
- 4.4 A priority for the Council will be to work with partners to produce an air quality action plan for the new AQMA (detailed at 4.2), however, the feasibility of actions to feed into the plan will be limited due to it being on a main road which is heavily used.

## **Actions taken during 2022 in relation to air quality:**

- For 2022 tube 2 was relocated to 60 Hud Hey Road following a resident request
- Tube 11 was moved further along Bacup Road outside 450 Bacup Road which is a pavement fronted terrace on a main road
- Two electric charge points were installed in the council office car park
- Reduction in vehicle emissions due to office based council staff working from home up to 40% of the working week
- Participation in the DEFRA Air Quality and Industrial Emissions Team review of the national Air Quality Strategy consultation in relation to LA's meeting the national PM2.5 targets
- Email sent to Lancashire County Council to remove a road sign outside 7-9 Grane Road directing drivers to use Grane Road to Blackburn and Darwen
- Lancashire County Councils first round of community engagement on the Local Cycling and Walking Infrastructure Plans [Lancashire's Levelling Up Fund Bid - Lancashire County Council \(LCWIP\)](#)
- Resident questionnaire sent out about provision of electric charge points to support a On-street Residential Chargepoint Scheme funding bid for electric charge points on council owned car parks. Lancashire County Council can bid for on-street charge points and Lancashire County Council owned car parks On-Street Residential Chargepoint Scheme guidance for local authorities - GOV.UK ([www.gov.uk](http://www.gov.uk))
- The Rossendale Climate Network was created which is a group of like-minded individuals, schools, groups, businesses and organisations who are interested practical action to tackle the climate emergency in Rossendale. Find them on the Facebook page. <https://www.facebook.com/groups/rossendaleclimatenetwork>. They would like to hear from anyone who is taking local action or has some information to share with others in the area.
- Planning Supplementary Planning Document on climate change produced
- Environment Act 2021 came into force in May 2022 giving officers fixed penalty powers for clean air compliant burning still causing smoke nuisance
- Lancashire County Council advertised a new Principal Transport Planner Air Quality post Principal Transport Planner - LCC Careers ([lancashire.gov.uk](http://lancashire.gov.uk))
- Lancashire County Council and Blackburn with Darwen MBC are currently in the process of writing a joint EV strategy with Atkins and Field Dynamics. The strategy covers the whole of Lancashire (excluding Blackpool) and is based on GIS zoning outputs. They envisage this strategy to be a collaborative tool going forwards, particularly the GIS outputs which can be updated and added to

## **5. RISK**

5.1 All the issues raised and the recommendations in this report involve risk considerations as set out below:

- Local authority obligations may be enforced by the Secretary of State.
- Where a district council is preparing an action plan, county councils are required to submit measures related to their functions (ie, local transport, highways and public health) to help meet air quality objectives in their local area. Any disagreements between district and county councils over action plan proposals can be referred by either Council to the Secretary of State to decide.
- Secretary of State can give directions to the local authority if it is not meeting air quality standards, if it is failing to discharge its duties under the LAQM system, or if its actions under LAQM are inappropriate.

5.2 Continued joint working and cross authority cooperation will help mitigate the risks outlined.

**6. FINANCE**

6.1 Any future financial implications arising will have to be assessed separately as part of the Council's budget setting and resource allocations.

**7. LEGAL**

7.1 The Council must continue to work towards improvement of air quality to mitigate the risk of challenge or intervention although as outlined in previous years the risk of this is considered to be low.

**8. POLICY AND EQUALITIES IMPLICATIONS**

8.1 Consultation with statutory officers.

**9. REASON FOR DECISION**

9.1 Success in improving the air that we breathe relies on action by a wide range of organisations and individuals and continued work across the authority and in partnership with other public and private organisations is central to achieving this.

Background Papers	
Document	Place of Inspection
Annual Status Report	Appendix A



# 2023 Air Quality Annual Status Report (ASR)

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

Date: September 2023

<b>Information</b>	<b>Rossendale Borough Council Details</b>
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<b>Report Reference Number</b>	ASR2023
<b>Date</b>	September 2023

# Executive Summary: Air Quality in Our Area

## Air Quality in Rossendale Borough Council

Air pollution is associated with a number of adverse health impacts. It is recognised as a contributing factor in the onset of heart disease and cancer. Additionally, air pollution particularly affects the most vulnerable in society: children, the elderly, and those with existing heart and lung conditions. There is also often a strong correlation with equalities issues because areas with poor air quality are also often less affluent areas<sup>1,2</sup>.

The mortality burden of air pollution within the UK is equivalent to 29,000 to 43,000 deaths at typical ages<sup>3</sup>, with a total estimated healthcare cost to the NHS and social care of £157 million in 2017<sup>4</sup>.

Approximately 80% of a persons health and wellbeing is determined by activities and circumstances in their home and community and not medical health interventions.

The main air quality concern in Rossendale continues to be Nitrogen Dioxide (NO<sub>2</sub>) caused by road traffic vehicles. However there have been improvements and the two air quality management areas where revoked in 2022 as all of the diffusion tubes in those areas where more than 10% under the governments threshold of 40µg/m<sup>3</sup> for the past three years.

We have also declared a new air quality management area incorporating 13 residential properties between Gas Street and Holden Place numbered 240 to 268 Grane Road Haslingden BB4 4PB. This is an area of pavement fronted properties and only one side of the road is affected by the high levels of NO<sub>2</sub>. The council will be working with partners to develop an air quality action plan in 2023-4. We will update on this in next years ASR

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<sup>1</sup> Public Health England. Air Quality: A Briefing for Directors of Public Health, 2017

<sup>2</sup> Defra. Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006

<sup>3</sup> Defra. Air quality appraisal: damage cost guidance, January 2023

<sup>4</sup> Public Health England. Estimation of costs to the NHS and social care due to the health impacts of air pollution: summary report, May 2018

Air quality and environmental improvements are a part of the Councils Climate Change Strategy 2020-2030 which is available to view by clicking on this link [Climate Change | Rossendale Borough Council](#)

The aim of this strategy is to make Rossendale Borough Council net-zero carbon by 2030 and to work in partnership to reduce carbon emissions for the whole of Rossendale. This incorporates less fossil fuel burning leading to less emissions of air pollution.

## Actions to Improve Air Quality

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

The Environmental Improvement Plan<sup>5</sup> sets out actions that will drive continued improvements to air quality and to meet the new national interim and long-term PM<sub>2.5</sub> targets. The National Air Quality Strategy, due to be published in 2023, will provide more information on local authorities' responsibilities to work towards these new targets and reduce PM<sub>2.5</sub> in their areas. The Road to Zero<sup>6</sup> details the approach to reduce exhaust emissions from road transport through a number of mechanisms; this is extremely important given that the majority of Air Quality Management Areas (AQMAs) are designated due to elevated concentrations heavily influenced by transport emissions.

### Actions taken by Rossendale Borough Council during 2022 in relation to air quality

- For 2022 tube 2 was relocated to 60 Hud Hey Road following a resident request
- Tube 11 was moved further along Bacup Road outside 450 Bacup Road which is a pavement fronted terrace on a main road
- 4 council waste vehicles were being trialled to run on bio-diesel
- Two electric charge points were installed in the council office car park
- Reduction in vehicle emissions due to office based council staff working from home up to 40% of the working week
- Participation in the DEFRA Air Quality and Industrial Emissions Team review of the national Air Quality Strategy consultation in relation to LA's meeting the national PM<sub>2.5</sub> targets

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<sup>5</sup> Defra. Environmental Improvement Plan 2023, January 2023

<sup>6</sup> DfT. The Road to Zero: Next steps towards cleaner road transport and delivering our Industrial Strategy, July 2018

- Email sent to Lancashire County Council to remove a road sign outside 7-9 Grane Road directing drivers to use Grane Road to Blackburn and Darwen
- Lancashire County Councils first round of community engagement on the Local Cycling and Walking Infrastructure Plans (LCWIP)  
[https://www.lancashire.gov.uk/council/strategies-policies-plans/levelling-up-fund/?utm\\_source=Redirect&utm\\_medium=Shorturl&utm\\_campaign=Levellingup](https://www.lancashire.gov.uk/council/strategies-policies-plans/levelling-up-fund/?utm_source=Redirect&utm_medium=Shorturl&utm_campaign=Levellingup)
- Resident questionnaire sent out about provision of electric charge points to support a On-street Residential Chargepoint Scheme funding bid for electric charge points on council owned car parks. Lancashire County Council can bid for on-street charge points and Lancashire County Council owned car parks [On-Street Residential Chargepoint Scheme guidance for local authorities - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/guidance/on-street-residential-chargepoint-scheme-guidance-for-local-authorities)
- The Rossendale Climate Network was created which is a group of like-minded individuals, schools, groups, businesses and organisations who are interested practical action to tackle the climate emergency in Rossendale. Find them on the Facebook page. <https://www.facebook.com/groups/rossendaleclimatenetwork>. They would like to hear from anyone who is taking local action or has some information to share with others in the area.
- Planning Supplementary Planning Document on climate change produced
- Environment Act 2021 came into force in May 2022 giving officers fixed penalty powers for clean air compliant burning still causing smoke nuisance
- Lancashire County Council advertised a new Principal Transport Planner Air Quality post [Principal Transport Planner - LCC Careers \(lancashire.gov.uk\)](https://www.lancashire.gov.uk/careers/principal-transport-planner-air-quality)
- Lancashire County Council and Blackburn with Darwen MBC are currently in the process of writing a joint EV strategy with Atkins and Field Dynamics. The strategy covers the whole of Lancashire (excluding Blackpool) and is based on GIS zoning outputs.  
They envisage this strategy to be a collaborative tool going forwards, particularly the GIS outputs which can be updated and added to.

## **Lancashire County Council's Public Health Summary for Air Quality Annual Status Reports, 2023**

In Lancashire the strongest evidence we have on the population health impacts of air pollution comes from Public Health England's Public Health Outcomes Framework. This Framework estimates the '[fraction of annual all cause adult mortality attributable to particulate air pollution \(measured as fine particulate matter, PM2.5\\*\)](#)' each year. It shows that, while the overall mortality rate from particulate air pollution in Lancashire-12 (4.8%) is lower than the England average (5.5%), air pollution remains a significant public health issue for the county (2021).

Working with district councils, Lancashire County Council (LCC) has an important role to play in taking action to reduce the health impacts of air pollution. Responsible for transport planning, network management, highway maintenance, public health and procuring local vehicle fleets, there are a number of ways LCC can support local and county wide efforts to improve air quality. In summary, the following activities are underway or in development:

### **1. Encouraging the use of sustainable forms of travel**



Lancashire's cycling and walking strategy, *Actively Moving Forward*, sets out an ambitious plan for increasing the number of people walking and cycling in the county by 2028. By improving and increasing access to cycling and walking infrastructure, alongside training and promotional activities, it aims to significantly increase the amount of cycling and walking people do across the county. Information on the County Council's ongoing activities in this area can be found on the [Active Travel in Lancashire](#) website.

As part of Lancashire's cycling and walking strategy, work has now commenced on developing Local Cycling and Walking Infrastructure Plans (LCWIPs) for Lancashire. LCWIP's have been defined for seven areas across Lancashire. These are:

- Lancaster
- Central Lancashire
- West Lancashire
- Fylde Coast
- Ribble Valley
- Burnley and Pendle
- Rossendale and Hyndburn

As part of the LCWIP process extensive public and stakeholder engagement is underway. Following on from this, it is planned for all LCWIP's to be completed by late 2023. The Plans will include a network plan for cycling and walking infrastructure and a prioritised list of schemes for delivery over short, medium and long term timeframes. These plans will be used to support future infrastructure decisions and to access new funding schemes as they become available.

The Road Safety Team work with schools, workplaces and the community to encourage safe and sustainable modes of travel. Initiatives for schools are promoted through the [Safer Travel Moodle](#) and include: a series of cycling and walking safety training programmes; guidance and resources for teachers to encourage safe and active travel; and support for creating travel plans.

Bus services across Lancashire operate in a deregulated market, meaning the County Council doesn't control the bus network, franchise routes or control fares. In the next three years, the county council will continue to work more closely with bus operators, alongside local communities, to create a network that people want and will use. The council has published a ten-year Enhanced Partnership Plan and Scheme alongside its [Bus Service Improvement Plan](#) which together will deliver measures to restore confidence and grow patronage numbers.

## **2. Supporting the transition to low emission vehicles**

Lancashire County Council, working with BP Pulse, has installed 150 Electric Vehicle charge points either at the side of the adopted highway or in county council car parks. These chargepoints are ultra chargers which will allow most vehicles to take a full charge in less

than an hour and Fast Chargers that will take around three hours to charge the vehicles. The mix of these units depends on location, power supply and demand.

Since the installation of these points the focus has been on supporting residents who do not have off-street parking charge at home, with the County Council trialing an innovative footway cable tray which will provide a low cost and practical solution to support residents without off street parking charge at home. The cable-tray enables residents to safely pass an electric cable across the footway from their property to the carriageway enabling charging their vehicle from their domestic supply. Two products (one designed in-house and one adapted product) have been trialed at several residential properties in the county. The county council is one of 16 councils in England to secure funding from the Local Electric Vehicle Infrastructure (LEVI) extended pilot scheme to expand this trial to more residents and to trial lamp post integrated chargepoints in residential areas, helping those that do not have access to off-street parking.

In addition to the LEVI extended pilot the county council has been allocated indicative funding of £10.1m from the LEVI capital fund for the provision of local, low power, public on-street charging infrastructure. This is subject to the submission of a delivery plan in early 2024 that is accepted by the Department for Transport. This will help us scale up the deployment of local chargepoints and solutions for residents without access to off-street parking beyond the pilot projects and deliver the vision and aims of the Lancashire and Blackburn with Darwen EV Infrastructure Strategy.

The county council's parking services fleet is now fully electric, with charging infrastructure installed at the offices and depots where the vehicles are based, and regularly visit. Fleet services are continuing to deliver their programme to upgrade to ultra low emission vehicles.

### **3. Creating cleaner, healthier road networks**

Work to develop the next Local Transport Plan (LTP4) for Lancashire, Blackpool and Blackburn with Darwen is underway. The Public Health team has submitted an evidence base to inform the process, highlighting transport related health challenges affecting the population of Lancashire and making recommendations about how local transport planning policy can make a contribution to addressing these. The local [Highways and Transport Masterplans](#) will be refreshed to align with the priorities of LTP4. This will provide an opportunity to identify longer-term network solutions that address issues in AQMAs and have a positive impact on air quality generally.

### **4. Embedding air quality into policy**

The County Council works with district planners to ensure air quality is a key consideration of Local Plans, alongside wider public health issues. It supports district councils in developing policies that seek to ensure new developments do not contribute to increasing levels of air pollutants and that requirements for appropriate mitigation are in place.

The County Council, as part of its highways input into planning applications, actively encourages measures that aim to promote sustainable forms of travel. Working under the direction of the National Planning Policy Framework, the County Council seeks measures that facilitate cycling and walking, increase the use of public transport and provide access

to electric vehicle charge points. The County Council also seeks funding from developers, through section 106 contributions, to support existing bus services or to provide new bus services suitable to serve development sites once their built.

## 5. Raising awareness and increasing engagement

The Lancashire Insight website provides information on the sources and health impacts of air pollution across the county. Webpages include a [Summary of Emissions Data](#) and [Monitoring of Air Quality and Health Impacts](#).

## Conclusions and Priorities

The two previous AQMAs were revoked due to a successful reduction in the NO<sub>2</sub> to below government levels for over 3 years and a new fast track AQMA was declared on 8<sup>th</sup> December 2022 and thankfully there is a general trend of reduction experienced across the sites.

A priority for the council will be to work with partners to produce an air quality action plan for the new AQMA but the challenge in this area will be around actions for the air quality action plan which will be very limited due to it being on a main road. Grane Road the B6232 into and out of the west of the borough is used by drivers as a short cut to and from the M65 rather than using the A56.

## Local Engagement and How to get Involved

Due to Covid-19 and the lockdowns, when the air quality improved, the detrimental impact of poor air quality was highlighted which has, thankfully become much more in the public radar. Covid-19 prompted changes in people's behaviours and it demonstrated we can reduce our reliance on carbon-based travel and make a switch to cycling and walking more. We need a much broader social movement that allows everyone to play their part.

Thinking about air pollution and climate change on a worldwide, or even country scale can be daunting because as individuals we can often feel insignificant. Yet if we all work to reduce the amount of fuel we use and the number of chemicals we use at home, we will improve the quality of the air that we breathe and help the local and global problem. Other ways we can all contribute to improving air quality are as follows:

- Using public transport more
- Reducing car use and doing more car sharing for things like the school runs sorted informally or see <https://liftshare.com/uk>

- Changing to an electric or hybrid vehicle see <https://www.gov.uk/government/organisations/office-for-zero-emission-vehicles>
- Cycling and walking where possible
- Using less chemicals and more natural products in the home to reduce the toxic load on your internal air quality see <https://www.nice.org.uk/guidance/ng149>
- Not having garden bonfires and only burning smokeless fuel on domestic stoves as the whole of Rossendale is a smoke control area (except for a few outlying rural properties see [https://www.rossendale.gov.uk/info/210197/environmental\\_protection/10622/report\\_pollution/4](https://www.rossendale.gov.uk/info/210197/environmental_protection/10622/report_pollution/4)
- Working from home, if you can, to save commuting

There is no local air quality action groups to the knowledge of the writer however there is an active Clean Air Parents Network public facebook group.

The Rossendale Climate Network was created which is a group of like-minded individuals, schools, groups, businesses and organisations who are interested practical action to tackle the climate emergency in Rossendale. Find them on the Facebook page.

<https://www.facebook.com/groups/rossendaleclimatenetwork>. They would like to hear from anyone who is taking local action or has some information to share with others in the area. Client Earth are activist lawyers committed to securing a healthier planet. Their website is [ClientEarth | ClientEarth](#)

Further information on air quality and air pollution forecasts can be found on the DEFRA website UK Air quality Information Resource following this link [Home - Defra, UK](#)

The Choked up Campaign is teenagers in London raising awareness of air pollution issues Living Street UK is a charity who want a nation where walking is the natural choice for everyday local journeys see [Living Streets | Home Page | Living Streets](#)

## **Local Responsibilities and Commitment**

This ASR was prepared by the Environmental Health Department of Rossendale Borough Council with the support and agreement of the following officers and departments:

Lorna Robinson Senior Environmental Health Officer

Phil Morton Public Protection Manager

This ASR has been approved by: Phil Morton

This ASR has not been signed off by a Director of Public Health.

If you have any comments on this ASR please send them to Lorna Robinson at:

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## Table of Contents

<b>Executive Summary: Air Quality in Our Area</b> .....	<b>i</b>
Air Quality in Rossendale Borough Council .....	i
Actions to Improve Air Quality .....	ii
Conclusions and Priorities .....	vi
Local Engagement and How to get Involved .....	vi
Local Responsibilities and Commitment .....	vii
<b>1 Local Air Quality Management</b> .....	<b>1</b>
<b>2 Actions to Improve Air Quality</b> .....	<b>2</b>
2.1 Air Quality Management Areas .....	2
2.2 Progress and Impact of Measures to address Air Quality in Rossendale Borough Council	4
2.3 PM <sub>2.5</sub> – Local Authority Approach to Reducing Emissions and/or Concentrations .....	6
<b>3 Air Quality Monitoring Data and Comparison with Air Quality Objectives and National Compliance</b> .....	<b>7</b>
3.1 Summary of Monitoring Undertaken .....	7
3.1.1 Automatic Monitoring Sites .....	7
3.1.2 Non-Automatic Monitoring Sites .....	7
3.2 Individual Pollutants .....	7
3.2.1 Nitrogen Dioxide (NO <sub>2</sub> ) .....	7
3.2.2 Particulate Matter (PM <sub>10</sub> ) .....	8
3.2.3 Particulate Matter (PM <sub>2.5</sub> ) .....	8
3.2.4 Sulphur Dioxide (SO <sub>2</sub> ) .....	8
<b>Appendix A: Monitoring Results</b> .....	<b>9</b>
<b>Appendix B: Full Monthly Diffusion Tube Results for 2022</b> .....	<b>28</b>
<b>Appendix C: Supporting Technical Information / Air Quality Monitoring Data QA/QC</b> .....	<b>30</b>
New or Changed Sources Identified Within Rossendale Borough Council During 2022 .....	30
Additional Air Quality Works Undertaken by Rossendale Borough Council During 2022 .....	30
QA/QC of Diffusion Tube Monitoring .....	30
Diffusion Tube Annualisation .....	30
Diffusion Tube Bias Adjustment Factors .....	30
NO <sub>2</sub> Fall-off with Distance from the Road .....	31
QA/QC of Automatic Monitoring .....	32
PM <sub>10</sub> and PM <sub>2.5</sub> Monitoring Adjustment .....	32
Automatic Monitoring Annualisation .....	32
NO <sub>2</sub> Fall-off with Distance from the Road .....	32
<b>Appendix D: Map(s) of Monitoring Locations and AQMAs</b> .....	<b>33</b>
<b>Appendix E: Summary of Air Quality Objectives in England</b> .....	<b>39</b>
<b>Glossary of Terms</b> .....	<b>40</b>

<b>References</b>	<b>41</b>
-------------------	-----------

## Figures

Figure A.1 – Trends in Annual Mean NO <sub>2</sub> Concentrations.....	15
Figure A.2 – Trends in Number of NO <sub>2</sub> 1-Hour Means > 200µg/m <sup>3</sup> .....	20
Figure A.3 – Trends in Annual Mean PM <sub>10</sub> Concentrations .....	22
Figure A.4 – Trends in Number of 24-Hour Mean PM <sub>10</sub> Results > 50µg/m <sup>3</sup> .....	24
Figure A.5 – Trends in Annual Mean PM <sub>2.5</sub> Concentrations .....	26
Figure D.1 – Map of Non-Automatic Monitoring Site.....	33

## Tables

Table 2.1 – Declared Air Quality Management Areas.....	3
Table 2.2 – Progress on Measures to Improve Air Quality.....	5
Table A.1 – Details of Automatic Monitoring Sites .....	9
Table A.2 – Details of Non-Automatic Monitoring Sites .....	10
Table A.3 – Annual Mean NO <sub>2</sub> Monitoring Results: Automatic Monitoring (µg/m <sup>3</sup> ).....	12
Table A.4 – Annual Mean NO <sub>2</sub> Monitoring Results: Non-Automatic Monitoring (µg/m <sup>3</sup> ) ....	12
Table A.5 – 1-Hour Mean NO <sub>2</sub> Monitoring Results, Number of 1-Hour Means > 200µg/m <sup>3</sup> .....	19
Table A.6 – Annual Mean PM <sub>10</sub> Monitoring Results (µg/m <sup>3</sup> ) .....	21
Table A.7 – 24-Hour Mean PM <sub>10</sub> Monitoring Results, Number of PM <sub>10</sub> 24-Hour Means > 50µg/m <sup>3</sup> .....	23
Table A.8 – Annual Mean PM <sub>2.5</sub> Monitoring Results (µg/m <sup>3</sup> ).....	25
Table A.9 – SO <sub>2</sub> 2022 Monitoring Results, Number of Relevant Instances .....	27
Table B.1 – NO <sub>2</sub> 2022 Diffusion Tube Results (µg/m <sup>3</sup> ) .....	28
Table C.1 – Annualisation Summary (concentrations presented in µg/m <sup>3</sup> ).....	<b>Error!</b>
<b>Bookmark not defined.</b>	
Table C.2 – Bias Adjustment Factor .....	31
Table C.3 – Local Bias Adjustment Calculation .....	31
Table C.4 – NO <sub>2</sub> Fall off With Distance Calculations (concentrations presented in µg/m <sup>3</sup> )	31
Table E.1 – Air Quality Objectives in England .....	39



# 1 Local Air Quality Management

This report provides an overview of air quality in Rossendale Borough Council during 2022. 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 Rossendale Borough Council to improve air quality and any progress that has been made.

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

## 2 Actions to Improve Air Quality

### 2.1 Air Quality Management Areas

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

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

- NO<sub>2</sub> annual mean

We have declared a new AQMA in an area of Grane Road, Haslingden area due to exceedances of the NO<sub>2</sub> annual mean air quality objective.

We have revoked AQMAs 1 and 2 due to over three years being under the annual objective with NO<sub>2</sub> levels continuing to fall.

**Table 2.1 – Declared Air Quality Management Areas**

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance: Declaration	Level of Exceedance: Current Year	Number of Years Compliant with Air Quality Objective	Name and Date of AQAP Publication	Web Link to AQAP
AQMA 3	7 <sup>th</sup> December 2022	NO <sub>2</sub>	The designated area incorporates thirteen residential properties between Gas Street and Holden Place numbered 240 to 268 Grane Road Haslingden BB4 4PB	NO	50.4 µg/m <sup>3</sup>	46.7 µg/m <sup>3</sup>	0	Not published yet	Not published yet

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

**Rossendale Borough Council confirm that all current AQAPs have been submitted to Defra**

## **2.2 Progress and Impact of Measures to address Air Quality in Rossendale Borough Council**

Defra's appraisal of last year's ASR concluded that the report was well structured, detailed and provided the information specified in the guidance.

Rossendale Borough Council hasn't taken forward any direct measures during the current reporting year of 2022 in pursuit of improving local air quality. The two existing AQMAs have been revoked and a new AQMA was declared and an Air Quality Action Plan will be produced in the next 12-18 months.

**Table 2.2 – Progress on Measures to Improve Air Quality**

Measure No.	Measure	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
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The action plan will be reviewed and updated following the development of the Action Plan for the new AQMA on a small section of Grane Road Haslingden

## 2.3 PM<sub>2.5</sub> – Local Authority Approach to Reducing Emissions and/or Concentrations

As detailed in Policy Guidance LAQM.PG22 (Chapter 8), local authorities are expected to work towards reducing emissions and/or concentrations of PM<sub>2.5</sub> (particulate matter with an aerodynamic diameter of 2.5µm or less). There is clear evidence that PM<sub>2.5</sub> has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases.

Rossendale Borough Council currently doesn't measure for PM<sub>2.5</sub> as it's not currently a legal requirement. Using the DEFRA background mapping resource it shows PM<sub>2.5</sub> in Rossendale in 2022 to have a maximum background mean of 7.5 µg/m<sup>3</sup>.

The maximum in Rossendale in 2022 was lower compared to the northern region which had a maximum background of 13.5 µg/m<sup>3</sup> and also lower than neighbouring authorities which had maximum background means of 8.7 µg/m<sup>3</sup> at Burnley Borough Council and Hyndburn Borough Council and 7.9 µg/m<sup>3</sup> at Blackburn with Darwen Borough Council and Calderdale Borough Council.

Under the Environment Act 2021 Government has an annual mean concentration target for PM<sub>2.5</sub> of 10 µg/m<sup>3</sup>. Rossendale Borough Council is below the annual mean concentration target but we are taking the following measures to address and reduce PM<sub>2.5</sub>:

- A no open burning condition is attached to approved planning applications on demolition and construction sites
- Council Officers responding to requests for service in relation to domestic garden bonfires advising people that recycling garden waste is the most appropriate way of disposing of garden waste. We also signpost residents to apply for the Council's fortnightly garden waste collection service
- Prompt investigation of smoky domestic chimney and dark smoke complaints under the Clean Air Act 1993 and Environment Act 2021
- Partnership working with the Environment Agency and Environmental Enforcement colleagues in relation to complaints about trade and commercial waste burning/inappropriate disposal of trade waste

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

This section sets out the monitoring undertaken within 2022 by Rossendale Borough Council and how it compares with the relevant air quality objectives. In addition, monitoring results are presented for a three or five year period between 2018 and 2022 to allow monitoring trends to be identified and discussed.

### 3.1 Summary of Monitoring Undertaken

#### 3.1.1 Automatic Monitoring Sites

Rossendale Borough Council undertook no automatic (continuous) monitoring in 2022.

#### 3.1.2 Non-Automatic Monitoring Sites

Rossendale Borough Council undertook non- automatic (i.e. passive) monitoring of NO<sub>2</sub> at 20 sites during 2023. Table A.2 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, annualisation (where the annual mean data capture is below 75% and greater than 25%), and distance correction. Further details on adjustments are provided in Appendix C.

#### 3.2.1 Nitrogen Dioxide (NO<sub>2</sub>)

Table A.4 in Appendix A compares the ratified and adjusted monitored NO<sub>2</sub> annual mean concentrations for the past five years with the air quality objective of 40µg/m<sup>3</sup>. 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 2022 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.

There are no annual means greater than  $60\mu\text{g}/\text{m}^3$  which indicates that an exceedance of the 1-hour mean objective is unlikely.

Tube 2 was re-located to 60 Hud Hey Road Haslingden following a resident request who lives on a main road and was concerned about an increase in traffic. The annual level came back at  $25.7\mu\text{g}/\text{m}^3$  under the  $40\mu\text{g}/\text{m}^3$  air quality objective. Tube 11 was re-located to a pavement fronted terraced property position on Bacup Road Waterfoot and the annual level came back as  $29.9\mu\text{g}/\text{m}^3$  which again is under the  $40\mu\text{g}/\text{m}^3$  air quality objective.

There were only two exceedances of the air quality objective and both of these tubes were located in the newly declared AQMA 3 on a small section of Grane Road, Haslingden which were tube 12 which had an average of  $46.7\mu\text{g}/\text{m}^3$  and tube 19 which had an average of  $42.2\mu\text{g}/\text{m}^3$  but good news is that although above the annual air quality objective of  $40\mu\text{g}/\text{m}^3$  both locations showed a reduction in  $\text{NO}_2$  compared to the previous years.

AQMAs 1 and 2 have been revoked and the diffusion tubes currently in those areas will be distributed to other

### **3.2.2 Particulate Matter (PM<sub>10</sub>)**

Rossendale Borough Council undertook no particulate PM<sub>10</sub> monitoring during 2022

### **3.2.3 Particulate Matter (PM<sub>2.5</sub>)**

Annual Mean PM<sub>2.5</sub> monitoring is not undertaken in Rossendale Borough Council

### **3.2.4 Sulphur Dioxide (SO<sub>2</sub>)**

Sulphur dioxide monitoring is not undertaken in Rossendale Borough Council.



## Appendix A: Monitoring Results

Table A.1 – Details of Automatic Monitoring Sites

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) <sup>(1)</sup>	Distance to kerb of nearest road (m) <sup>(2)</sup>	Inlet Height (m)
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There are no automatic monitoring sites in Rossendale

**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) <sup>(1)</sup>	Distance to kerb of nearest road (m) <sup>(2)</sup>	Tube Co-located with a Continuous Analyser?	Tube Height (m)
1	Front of Casa Tapas Bacup Road Rawtenstall	Roadside	381394	422756	NO2	Revoked	5.0	2.0	No	1.8
2	60 Hud Hey Road Haslingden	Roadside	378495	424454	NO2	No	0.0	2.0	No	1.8
3	349 Manchester Road Haslingden	Roadside	379153	422234	NO2	Revoked	0.0	3.0	No	1.8
4	Jobcentre 83 Bacup Road Rawtenstall	Roadside	381325	422740	NO2	Revoked	20.0	3.0	No	1.8
5	377 Manchester Road Haslingden	Roadside	379209	422171	NO2	Revoked	0.0	3.0	No	1.8
6	359 Manchester Road Haslingden	Roadside	379175	422213	NO2	Revoked	0.0	4.0	No	1.8
7	366-368 Manchester Road Haslingden	Roadside	379193	422210	NO2	Revoked	0.0	2.0	No	1.8
8	5-7 Rawtenstall Road Haslingden	Roadside	379197	422213	NO2	Revoked	4.0	2.0	No	1.8
9	363 Manchester Road Haslingden	Roadside	379183	422200	NO2	Revoked	0.0	4.0	No	1.8
10	277 Grane Road Haslingden	Roadside	377879	422502	NO2	AQMA 3	0.0	5.0	No	1.8
11	450 Bacup Road Waterfoot	Roadside	382845	421978	NO2	No	0.0	0.0	No	1.8
12	250 Grane Road Haslingden	Roadside	377909	422488	NO2	AQMA 3	0.0	2.0	No	1.8

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) <sup>(1)</sup>	Distance to kerb of nearest road (m) <sup>(2)</sup>	Tube Co-located with a Continuous Analyser?	Tube Height (m)
13	30-32 Bacup Road Rawtenstall	Roadside	381377	422756	NO2	Revoked	0.0	2.0	No	1.8
14	24-26 Bacup Road Rawtenstall	Roadside	381358	422754	NO2	Revoked	0.0	2.0	No	1.8
15	22 Bacup Road Rawtenstall	Roadside	381350	422754	NO2	Revoked	0.0	2.0	No	1.8
16	2A Bacup Road Rawtenstall	Roadside	381161	422725	NO2	Revoked	0.0	6.0	No	1.8
17	1 Bacup Road Rawtenstall	Roadside	381121	422725	NO2	Revoked	8.0	2.0	No	1.8
18	222 Grane Road Haslingden	Roadside	378094	422560	NO2	No	0.0	3.0	No	1.8
19	256-258 Grane Road Haslingden	Roadside	377896	422488	NO2	AQMA 3	0.0	2.0	No	1.8
20	264 Grane Road Haslingden	Roadside	377899	422488	NO2	AQMA 3	0.0	2.0	No	1.8

**Notes:**

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

### Table A.3 – Annual Mean NO<sub>2</sub> Monitoring Results: Automatic Monitoring (µg/m<sup>3</sup>)

There is no annual mean NO<sub>2</sub> automatic monitoring undertaken in Rossendale Borough Council

### Table A.4 – Annual Mean NO<sub>2</sub> Monitoring Results: Non-Automatic Monitoring (µg/m<sup>3</sup>)

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) <sup>(1)</sup>	Valid Data Capture 2022 (%) <sup>(2)</sup>	2018	2019	2020	2021	2022
1	381394	422756	Roadside	85.4	85.4	33.3	32.3	23.8	26.2	25.3
2	378495	424454	Roadside	100	100.0	N/A	N/A	N/A	N/A	25.7
3	379153	422234	Roadside	100	100.0	31.9	27.3	22.0	24.9	21.4
4	381325	422740	Roadside	82.6	82.6	31.9	27.3	22.0	20.9	21.9
5	379209	422171	Roadside	90.1	90.1	31.8	28.7	22.1	23.7	24.5
6	379175	422213	Roadside	100	100.0	31.2	31.1	24.2	27.8	26.7
7	379193	422210	Roadside	92.6	92.6	33.5	32.3	26.3	30.0	28.3
8	379197	422213	Roadside	100	100.0	27.6	25.6	20.4	20.2	19.9
9	379183	422200	Roadside	100	100.0	33.6	31.6	25.3	26.9	28.2
10	377879	422502	Roadside	100	100.0	N/A	N/A	N/A	18.4	16.9

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) <sup>(1)</sup>	Valid Data Capture 2022 (%) <sup>(2)</sup>	2018	2019	2020	2021	2022
11	382845	421978	Roadside	92.3	92.3	N/A	N/A	N/A	N/A	29.9
12	377909	422488	Roadside	100	100.0	N/A	N/A	<b>44.9</b>	<b>50.4</b>	<b>46.7</b>
13	381377	422756	Roadside	92.6	92.6	<b>40.9</b>	32.2	28.4	32.7	31.2
14	381358	422754	Roadside	100	100.0	36.8	31.9	26.2	29.3	30.9
15	381350	422754	Roadside	100	100.0	39.7	32.2	28.8	31.8	30.8
16	381161	422725	Roadside	100	100.0	28.4	26.6	24.7	24.1	24.8
17	381121	422725	Roadside	71.9	71.9	35.9	34.7	28.6	29.6	29.9
18	378094	422560	Roadside	100	100.0	N/A	N/A	20.4	23.2	21.3
19	377896	422488	Roadside	100	100.0	N/A	N/A	<b>41.6</b>	<b>46.9</b>	<b>42.2</b>
20	377899	422488	Roadside	92.8	92.8	<b>47.8</b>	<b>46.6</b>	34.8	36.1	36.2

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  $\text{NO}_2$  annual mean objective of  $40\mu\text{g}/\text{m}^3$  are shown in **bold**.

NO<sub>2</sub> annual means exceeding 60µg/m<sup>3</sup>, indicating a potential exceedance of the NO<sub>2</sub> 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.

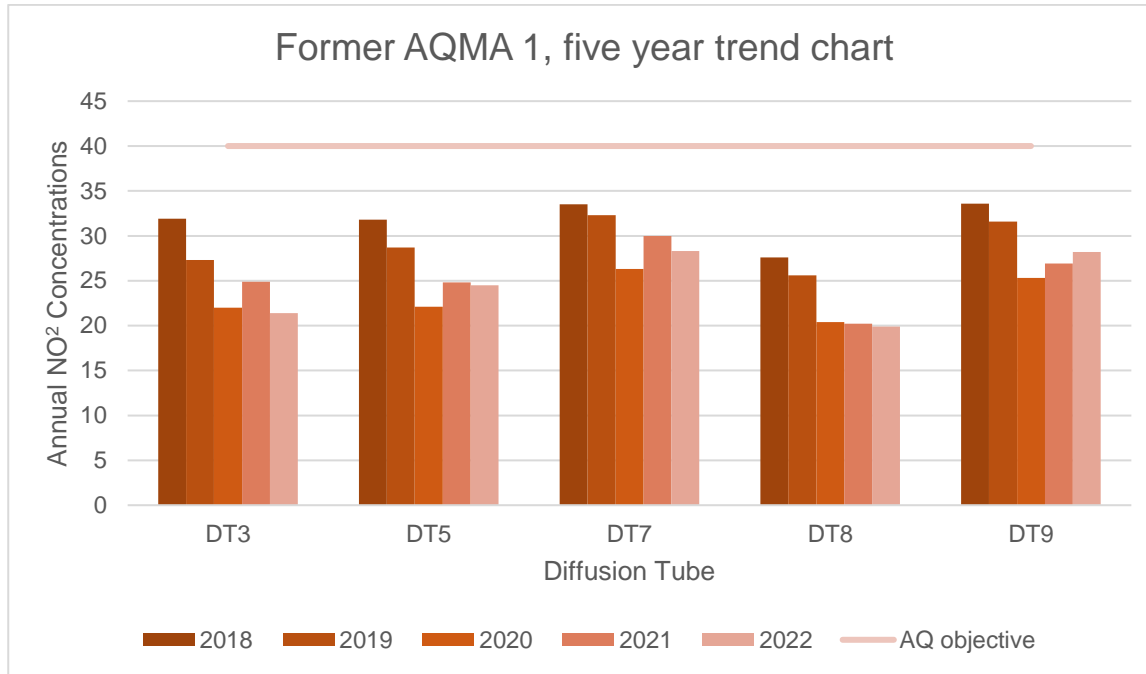
Concentrations are those at the location of monitoring and not those following any fall-off with distance adjustment.

(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%).

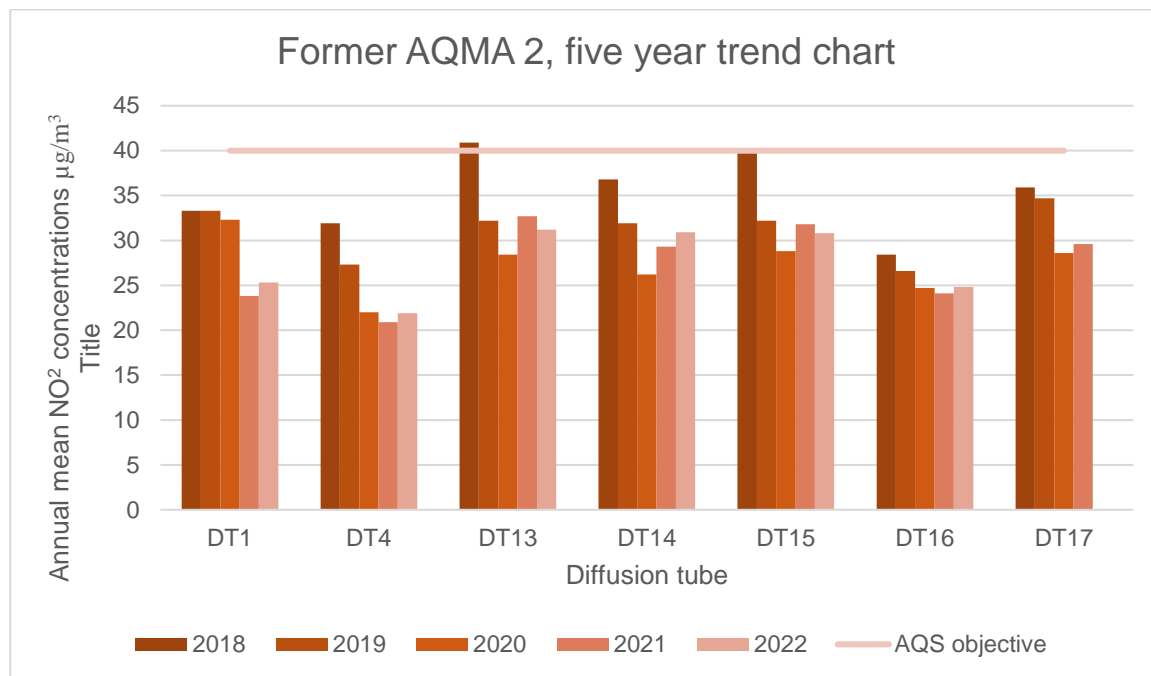
**Figure A.1 – Trends in Annual Mean NO<sub>2</sub> Concentrations**

**Former AQMA 1 Haslingden**



This presents NO<sub>2</sub> annual mean concentrations for sites in the former AQMA 1 between years 2018 to 2022. There are no exceedances of the annual mean objective in 2022 and there is a general trend of reduction experienced across the site. The AQMA has now been revoked.

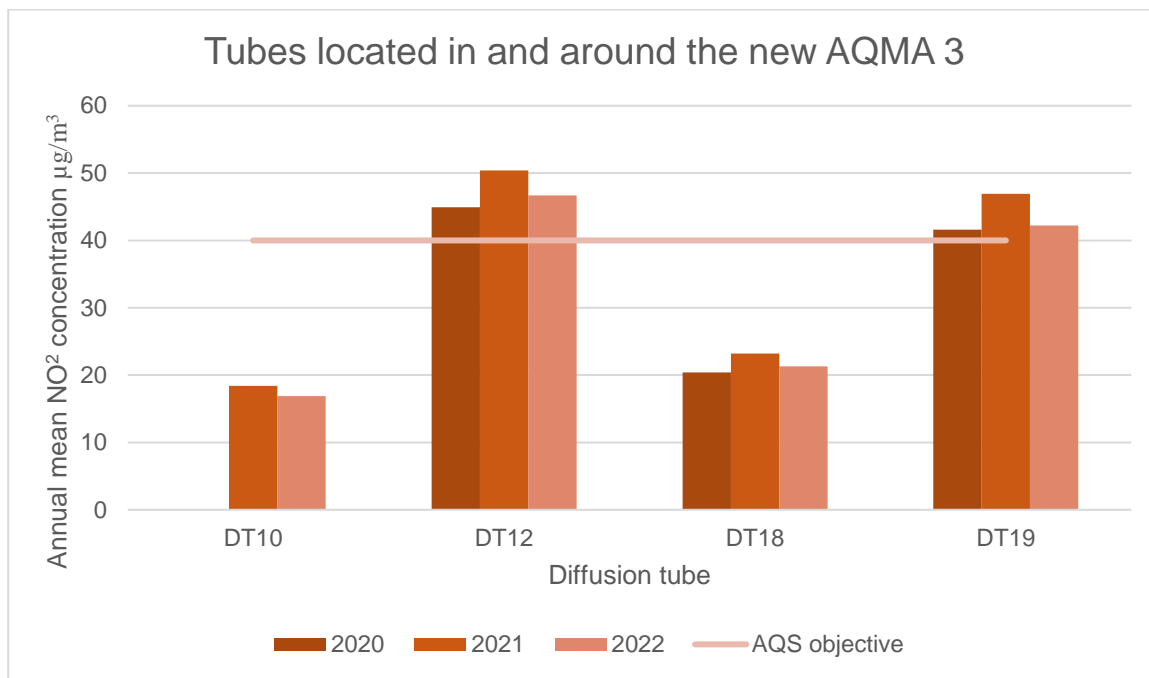
## Former AQMA 2 Rawtenstall



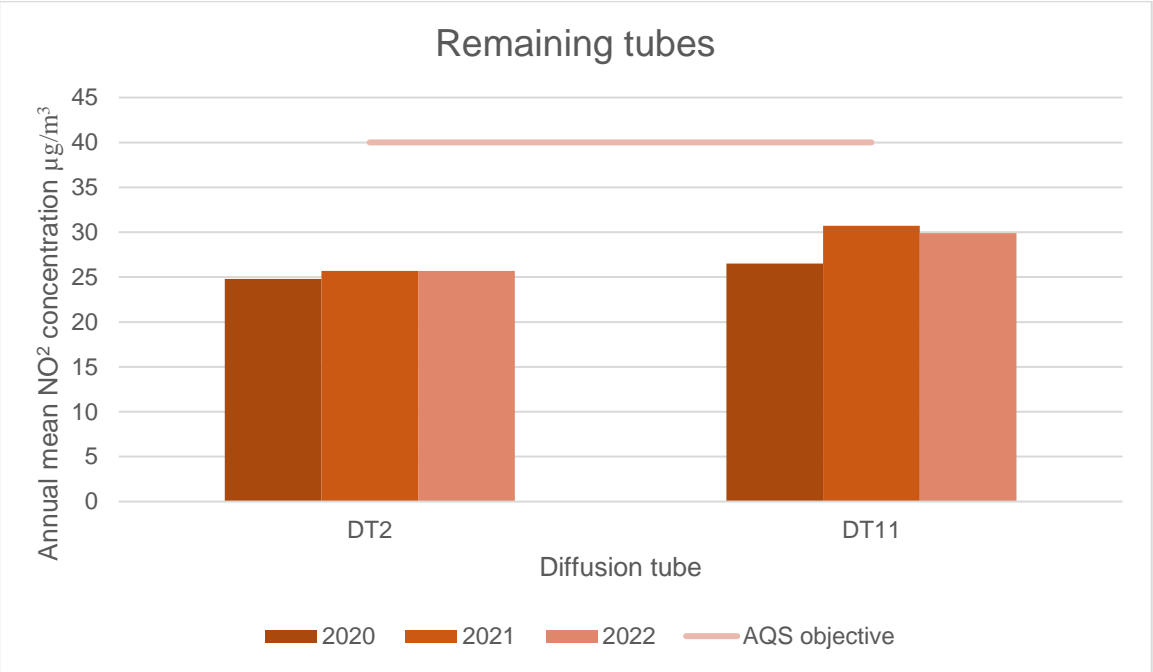
This presents NO<sub>2</sub> annual mean concentrations for sites in the former AQMA 2 between years 2018 to 2022. There are no exceedances of the annual mean objective in 2022 and there is a general trend of reduction experienced across the site. This AQMA has now been revoked



### New AQMA 3



This presents NO<sub>2</sub> annual mean concentrations for sites in (Tubes 12,18 and 19) and across the road (Tube 10) from the newly declared AQMA 3 between years 2020 to 2022. These are the exceedances of the annual mean objective in tubes 12 and 19 in 2022 however there is a general trend of reduction experienced across the site.



**Table A.5 – 1-Hour Mean NO<sub>2</sub> Monitoring Results, Number of 1-Hour Means > 200µg/m<sup>3</sup>**

No 1 hour mean NO<sub>2</sub> is undertaken in Rossendale Borough Council

**Figure A.2 – Trends in Number of NO<sub>2</sub> 1-Hour Means > 200µg/m<sup>3</sup>**

NO<sub>2</sub> 1-hour mean monitoring is not undertaken in Rossendale Borough Council

**Table A.6 – Annual Mean PM<sub>10</sub> Monitoring Results (µg/m<sup>3</sup>)**

No annual mean PM<sub>10</sub> Monitoring is undertaken in Rossendale Borough Council

### Figure A.3 – Trends in Annual Mean PM<sub>10</sub> Concentrations

No annual PM<sub>10</sub> monitoring is undertaken in Rossendale Borough Council

**Table A.7 – 24-Hour Mean PM<sub>10</sub> Monitoring Results, Number of PM<sub>10</sub> 24-Hour Means > 50µg/m<sup>3</sup>**

No 24-Hour Mean PM<sub>10</sub> Monitoring is undertaken in Rossendale Borough Council

**Figure A.4 – Trends in Number of 24-Hour Mean PM<sub>10</sub> Results > 50µg/m<sup>3</sup>**

PM<sub>10</sub> monitoring is not undertaken in Rossendale Borough Council



**Table A.8 – Annual Mean PM<sub>2.5</sub> Monitoring Results (µg/m<sup>3</sup>)**

Annual Mean PM<sub>2.5</sub> monitoring is not undertaken in Rossendale Borough Council

## Figure A.5 – Trends in Annual Mean PM<sub>2.5</sub> Concentrations

Annual Mean PM<sub>2.5</sub> is not undertaken in Rossendale Borough Council

**Table A.9 – SO<sub>2</sub> 2022 Monitoring Results, Number of Relevant Instances**

Annual Mean SO<sub>2</sub> monitoring is not undertaken in Rossendale Borough Council

## Appendix B: Full Monthly Diffusion Tube Results for 2022

Table B.1 – NO<sub>2</sub> 2022 Diffusion Tube Results (µg/m<sup>3</sup>)

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.76)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
1	381394	422756	missing	38.9	Missing	30.3	31.1	29.5	31.6	32.1	31.4	30.6	37.3	39.7	33.3	25.3		
2	378495	424454	44.7	33.3	40.0	27.0	30.6	29.5	32.1	35.7	28.9	34.7	32.6	36.1	33.8	25.7		
3	379153	422234	14.4	31.4	28.6	24.9	28.0	27.1	27.6	27.5	25.8	33.2	30.7	38.6	28.2	21.4		
4	381325	422740	39.5	29.3	36.7	25.7	erroneous	erroneous	21.2	24.7	24.8	29.1	26.2	30.9	28.8	21.9		
5	379209	422171	37.1	34.0	35.7	Missing	29.5	29.7	29.7	31.8	29.4	33.2	30.7	33.1	32.2	24.5		
6	379175	422213	46.0	32.4	42.8	29.7	29.5	30.5	30.4	31.5	31.1	38.9	44.6	34.1	35.1	26.7		
7	379193	422210	47.5	Missing	47.7	33.0	28.6	27.0	29.5	34.3	35.6	31.9	44.7	50.2	37.3	28.3		
8	379197	422213	28.8	25.7	37.0	21.6	21.5	20.9	21.0	21.9	25.4	28.8	30.0	32.1	26.2	19.9		
9	379183	422200	43.2	34.0	43.9	30.2	31.9	32.1	34.7	33.8	31.1	39.3	47.0	44.2	37.1	28.2		
10	377879	422502	33.0	19.6	29.5	21.5	18.2	14.9	17.1	18.9	21.9	19.9	25.4	26.3	22.2	16.9		
11	382845	421978	52.6	34.3	44.3	36.4	31.2	erroneous	31.6	34.8	39.2	28.7	45.1	53.9	39.3	29.9		
12	377909	422488	76.8	57.5	74.1	61.7	60.6	48.8	60.3	65.0	54.9	62.0	47.4	67.9	61.4	<b>46.7</b>		
13	381377	422756	56.7	38.0	47.2	42.0	35.6	34.6	35.7	missing	32.2	36.7	41.9	51.7	41.1	31.2		
14	381358	422754	49.3	32.6	45.1	41.7	37.0	33.0	36.0	43.8	38.8	37.3	39.0	54.2	40.7	30.9		
15	381350	422754	56.2	37.1	46.9	40.2	35.1	31.3	34.7	42.2	37.2	37.8	37.2	50.5	40.5	30.8		
16	381161	422725	45.3	35.4	39.5	25.1	26.9	26.7	28.9	25.9	26.3	35.4	35.9	40.0	32.6	24.8		
17	381121	422725	55.4	42.7	48.0	missing	34.5	30.6	Missing	35.0	31.1	43.8	33.4	missing	39.4	29.9		
18	378094	422560	27.3	22.7	40.3	30.6	24.2	19.7	23.9	28.9	24.2	28.5	31.1	34.2	28.0	21.3		
19	377896	422488	76.4	50.7	60.7	58.4	52.1	49.9	52.7	64.0	30.2	58.0	58.7	54.2	55.5	<b>42.2</b>		
20	377899	422488	missing	43.2	61.8	48.6	45.8	42.8	44.8	50.9	46.1	44.6	42.1	53.2	47.6	36.2		

☒ All erroneous data has been removed from the NO<sub>2</sub> diffusion tube dataset presented in Table B.1.

☒ National bias adjustment factor used

☒ Rossendale Borough Council confirm that all 2022 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System

**Notes:**

Exceedances of the NO<sub>2</sub> annual mean objective of 40µg/m<sup>3</sup> are shown in **bold**.

NO<sub>2</sub> annual means exceeding 60µg/m<sup>3</sup>, indicating a potential exceedance of the NO<sub>2</sub> 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 Rossendale Borough Council During 2022**

Rossendale Borough Council has not identified any new sources relating to air quality within the reporting year of 2022

### **Additional Air Quality Works Undertaken by Rossendale Borough Council During 2022**

Rossendale Borough Council has not completed any additional works within the reporting year of 2022

### **QA/QC of Diffusion Tube Monitoring**

#### **Diffusion Tube Annualisation**

All diffusion tube monitoring locations within Rossendale Borough Council recorded data capture of 75% therefore it was not required to annualise any monitoring data.

#### **Diffusion Tube Bias Adjustment Factors**

The diffusion tube data presented within the 2022 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<sub>x</sub>/NO<sub>2</sub> continuous analysers. Alternatively, the national database of diffusion tube co-location surveys provides bias factors for the relevant laboratory and preparation method. The monitoring has been completed in adherence with the 2022 Diffusion Tube Monitoring Calendar.

Rossendale Borough Council have applied a national bias adjustment factor of 0.76 (03/23) to the 2022 monitoring data. A summary of bias adjustment factors used by Rossendale Borough Council over the past five years is presented in Table C.1.

**Table C.1 – Bias Adjustment Factor**

Monitoring Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2022	National	03/23	0.76
2021	National	03/22	0.78
2020	National	03/21	0.77
2019	National	03/20	0.75
2018	National	06/19	0.75

**Table C.2 – Local Bias Adjustment Calculation**

A local bias adjustment factor has not been calculated.

### **NO<sub>2</sub> Fall-off with Distance from the Road**

Wherever possible, monitoring locations are representative of exposure. However, where this is not possible, the NO<sub>2</sub> concentration at the nearest location relevant for exposure has been estimated using the Diffusion Tube Data Processing Tool/NO<sub>2</sub> fall-off with distance calculator available on the LAQM Support website. Where appropriate, non-automatic annual mean NO<sub>2</sub> concentrations corrected for distance are presented in Table B.1.

No diffusion tube NO<sub>2</sub> monitoring locations within Rossendale Borough Council required distance correction during 2022.

**Table C.3 – NO<sub>2</sub> Fall off With Distance Calculations (concentrations presented in µg/m<sup>3</sup>)**

No fall-off with distance calculations where needed in 2022

## **QA/QC of Automatic Monitoring**

### **PM<sub>10</sub> and PM<sub>2.5</sub> Monitoring Adjustment**

No PM<sub>10</sub>/PM<sub>2.5</sub> monitoring is completed within Rossendale Borough Council.

### **Automatic Monitoring Annualisation**

No automatic monitoring is completed within Rossendale Borough Council.

### **NO<sub>2</sub> Fall-off with Distance from the Road**

Wherever possible, monitoring locations are representative of exposure and no fall-off calculations where necessary.



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

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

Tube 2

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Address Picker

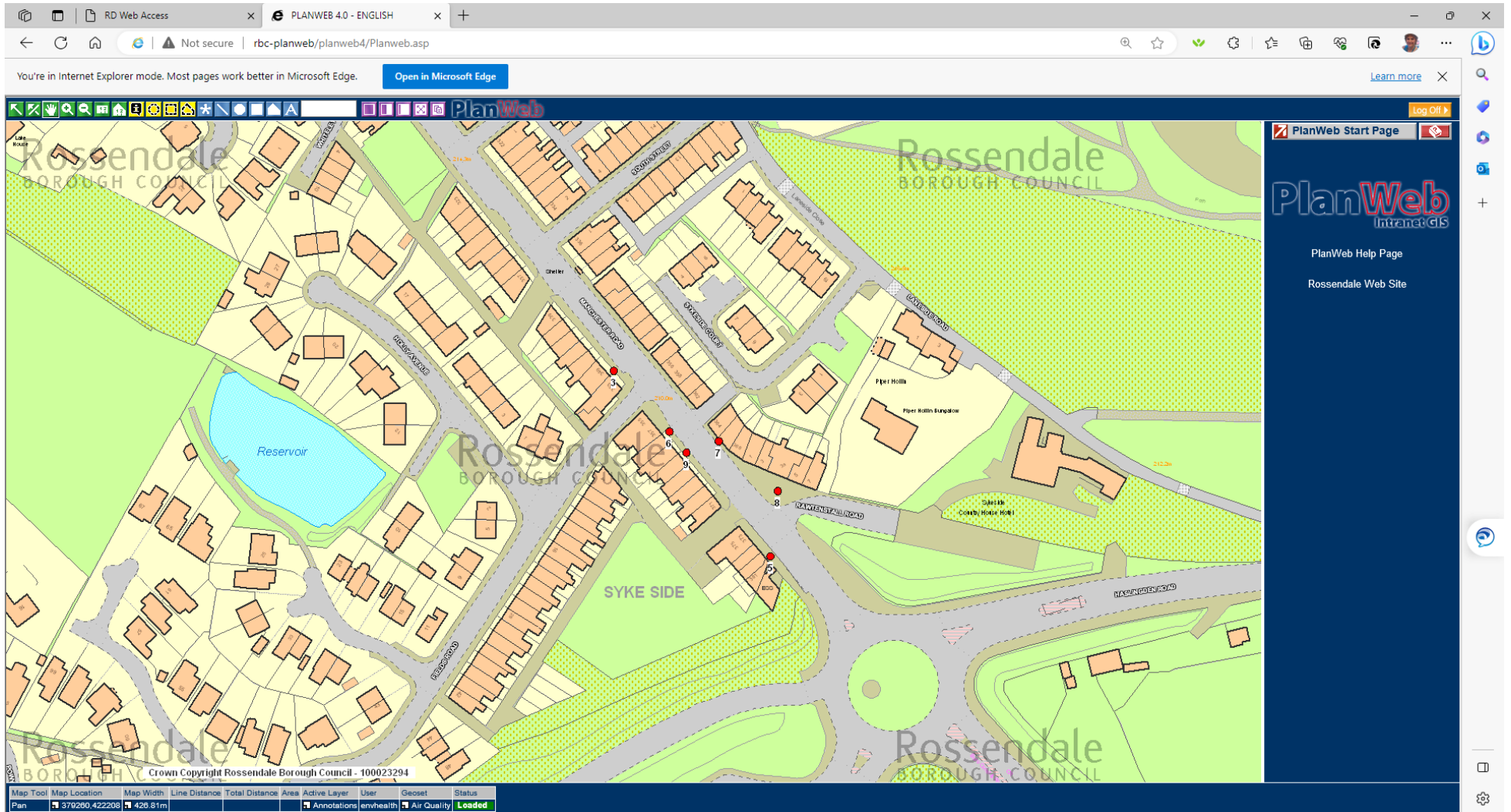
Records 1 to 50 of 251  
Page 1 of 6

251 addresses

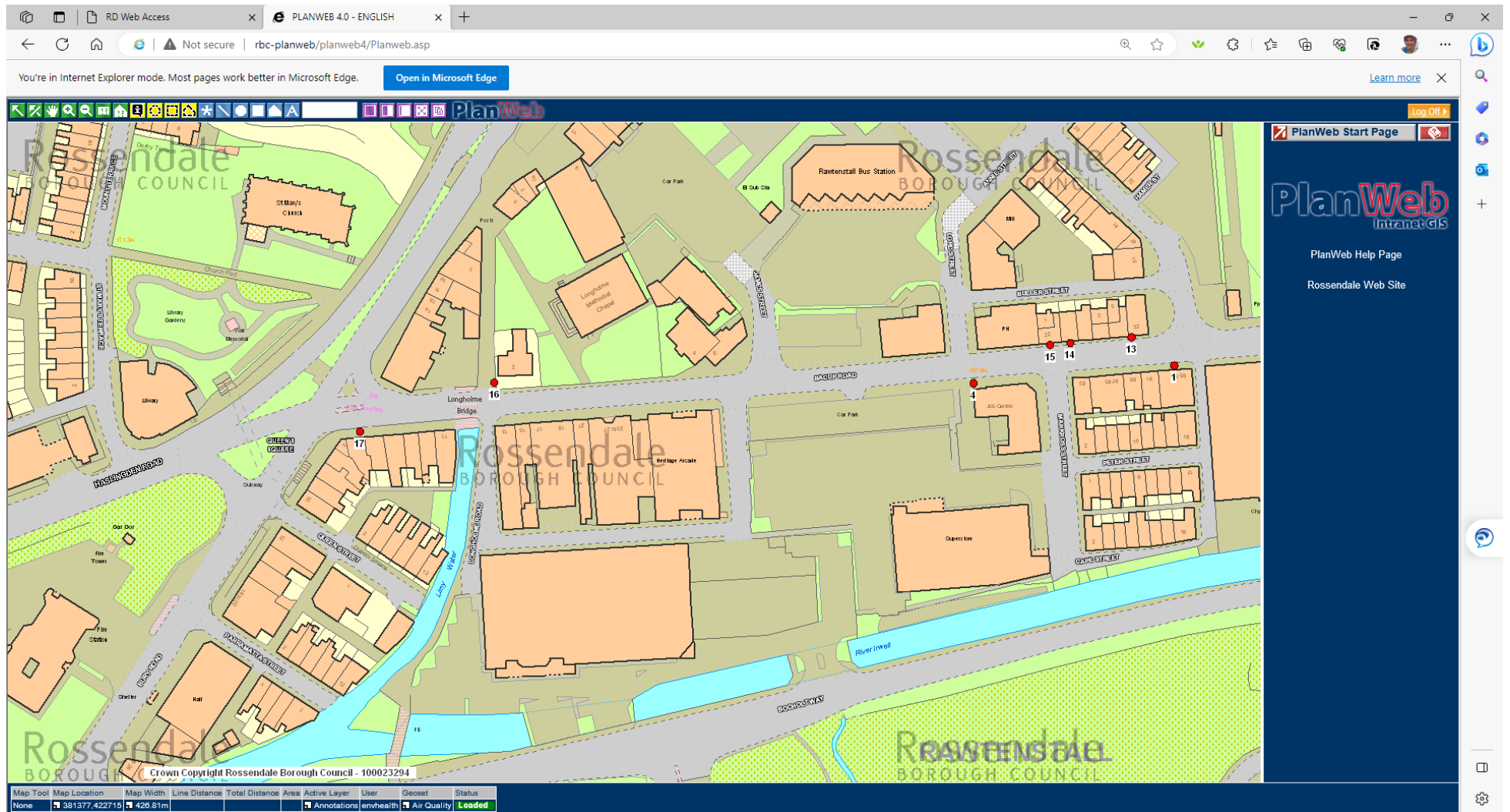
UPRN	Flat Name	Flat Number	Name
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10014228567			STREET RECORD
100012542862			AINSLEA
10014333069			CALF HEY RESERV
100012410882			CEMETERY LODGE
100012410883			CLOUD H FARM
10014331187			CLOUGH HEAD CAF AND INFORMA CENTRE
100012410884			GROWTR COTTAGE
100012410889			FISH TENEMEN BARN
100012542789			FISH TENEMEN COTTAGE
10014330845			FISH TENEMEN FARM
100012542800			GLEN DE
100012410891			GLEN VIE
100012410893			GRANE HOUSE

Map Tool Map Location Map Width Line Distance Total Distance Area Active Layer User Geocet Status  
 Zoom in 378572.424416 781.24m Annotations envhealth Air Quality Loaded

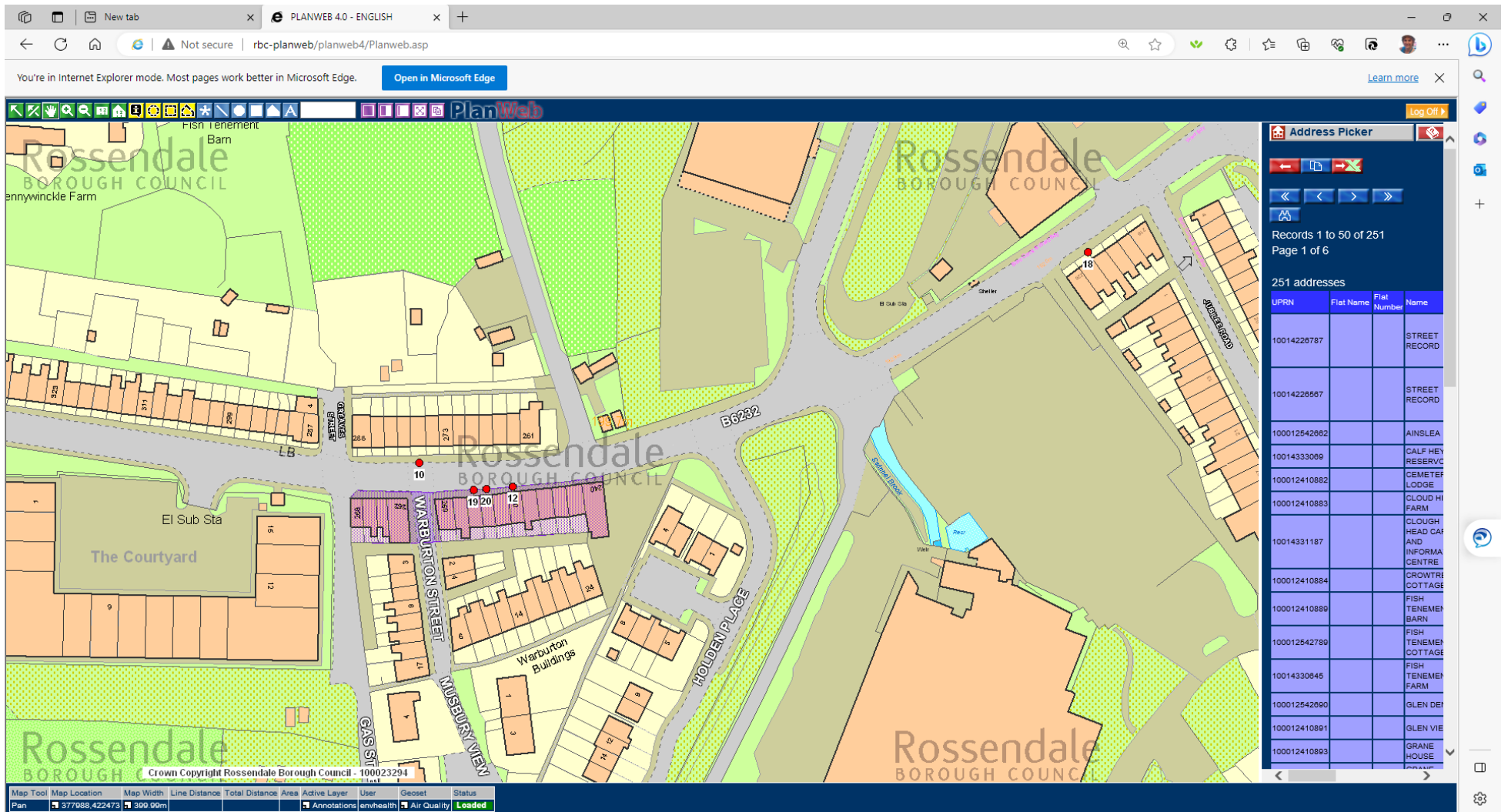
Tubes DT3,DT5,DT6,DT7,DT8 and DT9 located in the former AQMA 1



Diffusion Tubes DT1,DT4,DT13,DT14,DT15,DT16 and DT17 Bacup Road Rawtenstall located in former AQMA 2



# Diffusion Tubes DT10, DT12, DT18, DT19 (AQMA 3) and DT20 Grane Road Haslingden



Tube 11

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Address Picker

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Page 1 of 6

251 addresses

UPRN	Flat Name	Flat Number	Name
10014228787			STREET RECORD
10014228567			STREET RECORD
100012542862			AINSLEA
10014333059			CALF HEY RESERV
100012410882			CEMETERY LODGE
100012410883			CLOUD H FARM
10014331187			CLOUGH HEAD CAF AND INFORMA CENTRE
100012410884			GROWTR COTTAGE
100012410889			FISH TENEMEN BARN
100012542789			FISH TENEMEN COTTAGE
10014330845			FISH TENEMEN FARM
100012542800			GLEN DE
100012410891			GLEN VIE
100012410893			GRANE HOUSE

Map Tool | Map Location | Map Width | Line Distance | Total Distance | Area | Active Layer | User | Geoset | Status

Zoom in | 382851.421883 | 781.24m | Annotations | envhealth | Air Quality | Loaded

## Appendix E: Summary of Air Quality Objectives in England

**Table E.1 – Air Quality Objectives in England<sup>7</sup>**

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

<sup>7</sup> The units are in microgrammes of pollutant per cubic metre of air (µg/m<sup>3</sup>).

## Glossary of Terms

Abbreviation	Description
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority intends to achieve air quality limit values'
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives
ASR	Annual Status Report
Defra	Department for Environment, Food and Rural Affairs
DMRB	Design Manual for Roads and Bridges – Air quality screening tool produced by National Highways
EU	European Union
FDMS	Filter Dynamics Measurement System
LAQM	Local Air Quality Management
NO <sub>2</sub>	Nitrogen Dioxide
NO <sub>x</sub>	Nitrogen Oxides
PM <sub>10</sub>	Airborne particulate matter with an aerodynamic diameter of 10µm or less
PM <sub>2.5</sub>	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
QA/QC	Quality Assurance and Quality Control
SO <sub>2</sub>	Sulphur Dioxide



## References

- Local Air Quality Management Technical Guidance LAQM.TG22. August 2022.  
Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland.
- Local Air Quality Management Policy Guidance LAQM.PG22. August 2022.  
Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland.