

2022 Air Quality Annual Status Report (ASR)

In fulfilment of Part IV of the Environment Act 1995 Local Air Quality Management

Date: September 2022

Information	St Helens Council Details
Local Authority Officer	Emma Woodrow
Department	Place Services
Address	Wesley House, Corporation Street, St Helens, WA10 1HE
Telephone	07935 010666
E-mail	emmawoodrow@sthelens.gov.uk
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Executive Summary: Air Quality in Our Area

Air Quality in St Helens 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^{1,2}.

The mortality burden of air pollution within the UK is equivalent to 28,000 to 36,000 deaths at typical ages³, with a total estimated healthcare cost to the NHS and social care of £157 million in 2017⁴.

St Helens is a metropolitan borough of Merseyside and covers an area which includes the settlements of Sutton, St Helens, Earlestown, Rainhill, Rainford, Eccleston, Clockface, Haydock, Billinge and Newton-le-Willows.

St Helens consists of large areas of agricultural land and some industry, having a long association with glassmaking. There are two motorways that run within the Borough, the M6 and M62. The predominant source of pollution within the Borough is nitrogen dioxide from traffic.

St Helens monitors nitrogen dioxide using four continuous monitors and 32 passive diffusion tubes. Particulate matter is measured at one location via a continuous monitor.

The general overall trend within St Helens was decreasing levels of nitrogen dioxide and particulate matter over the last 5 years. However, the 2021 levels of nitrogen dioxide are higher than the 2020 nitrogen dioxide levels. This expected due to traffic driving increase as the lock down was lifted and more vehicles were on the road. Three of the four AQMAs

¹ Public Health England. Air Quality: A Briefing for Directors of Public Health, 2017

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

³ Defra. Air quality appraisal: damage cost guidance, July 2021

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

have levels of nitrogen dioxide below the national objective at the closest sensitive receptors.

St Helens works with other Local Authorities and key stakeholders through groups such as the Merseyside and Cheshire air quality group.

St Helens has declared four air quality management areas (AQMAs) which can be viewed using the following link https://www.sthelens.gov.uk/business/environmental-health/environmental-protection/air-quality/. There have been no new AQMAs declared since 2011 and there are no further areas which have been identified as requiring declaration.

The Liverpool City Region (LCR) task force closed down in 2020. However, the main output was the combined authority action plan in which can be found using the following link https://www.liverpoolcityregion-ca.gov.uk/improving-our-air-quality/.

Actions to Improve Air Quality

Whilst air quality has improved significantly in recent decades will continue to improve due to national policy decisions, there are some areas where local action is needed to improve air quality further.

The 2019 Clean Air Strategy⁵ sets out the case for action, with goals to reduce exposure to harmful pollutants. The Road to Zero⁶ sets out 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.

Highways Improvement Schemes

A580 Pewfall junction improvement scheme - Scheme completed

The scheme is being funded by the Liverpool City Region Combined Authority's Local Growth Fund through a £2.6m investment, with local developers contributing £500,000. St Helens Council will fund the remaining balance to help support economic growth and employment opportunities in the borough. The scheme aims to reduce traffic queuing on

⁵ Defra. Clean Air Strategy, 2019

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

Liverpool Road, benefiting residents living nearby. A dedicated pedestrian and cycle crossing will also be put in place across the East Lancashire Road.

A57 Sherdley Roundabout improvement scheme - Scheme completed

(www.sthelens.gov.uk/news/2020/february/04/a570-sherdley-roundabout-scheme-to-get-underway-this-month/)

Funded by £4.95m from the Local Growth Fund, awarded to the Liverpool City Region Local Enterprise Partnership (LEP) and invested through the Liverpool City Region Combined Authority's Strategic Investment Fund, the scheme will provide toucan crossing facilities for pedestrians and cyclists, widened footways and widened lane widths to improve traffic flows. The speed limit will be reduced to 30mph on all approaches.

A57 Warrington Road safety improvement scheme - Scheme completed

The work – funded by the Department for Transport safer road fund - will bring a number of benefits along A57 Warrington Road, and at its junctions with School Lane and A569 Clock Face Road, including pedestrian and cycling facilities.

Sustainable Urban Development scheme - Scheme completed

(www.sthelens.gov.uk/news/2020/february/06/college-street-desilting-works-to-start-thismonday/)

The scheme has been funded from the Liverpool City Region (Transforming Cities Fund) and European Regional Development Fund (ERDF). The scheme took 2 years to complete and will provide off-road cycling routes. The final stage included construction of new cycle paths from College Street through to Bold Moss. The flood improvement works to Rainford Brook between College Street and Merton Bank Road have now been completed.

Sustainable Transport Enhancement Package (STEP) - Scheme completed

This was a 6 year programme which ended in March 2021. The Council completed delivery of the cycling and walking improvements through the Local Growth Fund STEP programme, including signing 10 cycle routes in the borough, installing two contraflow cycle lanes and a new shared path at Piele Road.

Liverpool City Region Hydrogen Bus Project (https://www.liverpoolcityregion-ca.gov.uk/liverpool-city-region-launches-6-4m-hydrogen-bus-project/)

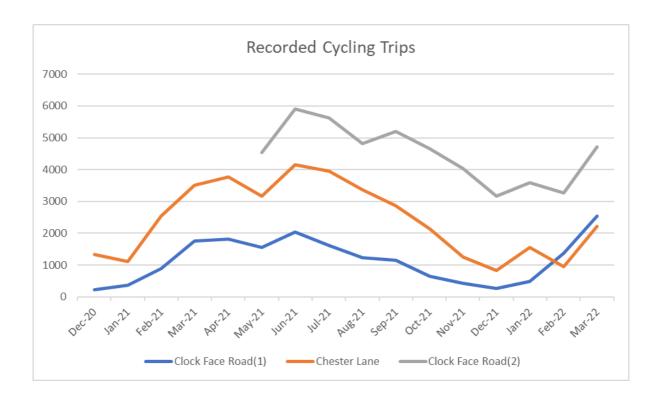
The Liverpool City Region Combined Authority is part of a consortium that was awarded £6.4m in March 2019 from the Office for Low Emission Vehicles to trial hydrogen buses. The bid includes the creation of a new hydrogen refuelling station at the Arriva bus depot on Jackson Street in St Helens. Up to 25 hydrogen-powered buses will be funded with the first trial expected to take place in 2020. The buses emitting nothing but water, so will contribute to improving air quality and a zero carbon economy. Funding of £12.5m from the Combined Authority Transforming Cities Fund has been awarded for 20 buses which will be used to serve the 10A route (https://www.liverpoolcityregion-ca.gov.uk/innovative-project-to-bring-new-hydrogen-buses-and-refuelling-facilities-to-liverpool-city-region-set-to-begin/

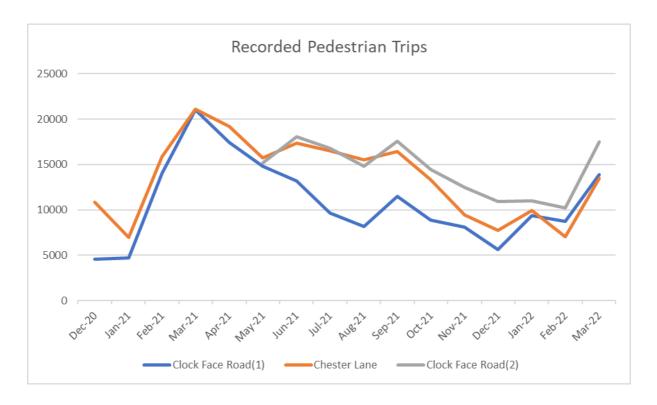
St Helens Southern Gateway (https://www.liverpoolcityregion-ca.gov.uk/new-station-building-and-car-park-extension-for-lea-green-rail-station-confirmed/

£14.8m project, £4.8m awarded to St Helens for highway works from the Liverpool City Region Transforming Cities Fund. The project includes 6 cycle routes and a 'CYCLOPS' junction – the first in the City Region – to be completed by March 2023. Wider project includes significant upgrades to facilities at Lea Green Station, including better provision for sustainable modes, electric vehicle charging infrastructure, and an improved park & ride facility.

Emergency Active Travel Fund Tranche 1 (www.liverpoolcityregion-ca.gov.uk/work-to-begin-on-six-new-pop-up-cycling-and-walking-routes-for-liverpool-city-region/ Scheme completed

£340,000 awarded to St Helens, part of £1.9m given to the City Region. Physically separated cycle lanes were installed on Chester Lane, Jubits Lane and Clock Face Road (between the roundabout and Gartons Lane). Three sensors have been installed on Chester Lane and Clock Face Road to monitor trips made by all modes from December 2020 until March 2022. The data shows there are more pedestrians using the routes than cyclists and there is some variation depending on the time of the year. The number of cycle and pedestrian trips recorded each month are shown below.





Active Travel Fund Tranche 2 (www.liverpoolcityregion-ca.gov.uk/8m-funding-secured-for-safer-walking-and-cycling-in-the-liverpool-city-region/)

£1.03m awarded to St Helens, part of £7.8m given to the City Region. The proposals for this scheme can be found at www.sthelens.gov.uk/activetravelfund. This includes cycling improvements on Clock Face Road and Warrington Road, extending infrastructure delivered as part of Emergency Active Travel Fund Tranche 1 and St Helens Southern Gateway. A further £90,000 has been awarded to deliver school streets at 3 schools in the borough. All works are due to complete by May 2022.

Cycling and Walking Activities

Active St Helens campaign (https://www.sthelens.gov.uk/public-health-and-wellbeing/campaigns/active-st-helens/) Matt Cunliffe, Public Health

This public health campaign aims to encourage people who live, work and study in St Helens to be more active. The campaign promotes cycling, walking and running. As well as cycle maps to download, it provides information on walking and cycling, with case studies to highlight the benefits through social media.

Living Streets

The charity funds an officer dedicated to working in the City Region to encourage walking and active travel in general. The Walk to School Outreach project includes supporting WOW at all schools involved, doing extra activities with any schools that are keen to do more and completing 2 or 3 intensive activities like school route audits which identify barriers to walking and are given to the council. Last year this included working intensively 8 schools in St Helens. The end of year report for 2019-20 which shows the shift in active travel (walking, cycling, scooting and park and stride) in St Helens was from 49% to 67%.

Led bike rides

There are numerous led bike rides available across St Helens to encourage the take up of cycling, including Pedal Power (a community group of volunteers offering free, fun and social bike rides for all people across the borough), the Healthy Living Team (provide weekly cycling sessions called 'Wheels for All' for those with additional needs, be that physical or learning needs), Woollybacks Mountain Bike Club and St Helens Cycle Racing Club. St Helens Road Safety Team promote cycling safety and support children and

young people to cycle. A number of these activities are just restarting following impacts of COVID-19.

Bikeability cycle training

National Standard on-road cycle training available to young people and children in Merseyside through the national cycle training programme. Organised through schools, Year 5, 6 and 7 pupils are offered Level 2 training which equips children with important skills to help them cycle on quiet roads. Year 7, 8 and 9 in High schools are offered Level 3 training which builds on level 2, and is more advanced giving skills in dealing with busier roads and roundabouts. Training is free and offered to every school in Merseyside. Between April 2018-April 2019, 1462 children and young people were trained in St Helens - with over 1000 children receiving Level 2 training, 52 SEN training and 325 Level 3 training. Between April 2019 and March 2020, 830 children and young people received Level 2 training, 53 SEN training and 60 receiving Level 3 training. Between April 2020 and March 2021, 180 children and young people were trained in St Helens – with 13 children achieving Level 1, 140 achieving Level 2 and 19 achieving Level 3 (lower figures due to COVID restrictions).

Cycle Monitoring

St Helens has 8 automatic cycle counters included in the Merseyside Cycle Monitoring Report (commissioned by the CA) which is used as evidence for the cycling target in the Merseyside Local Transport Plan. Overall across Merseyside, there has been a 1.56% increase in cycle usage from April 2019 to March 2020 so that the LTP3 based overall indicator is 38.1%. For St Helens in 2018/19, recorded cycle trip rates dropped by 5.5%, however a figure for 2019/20 cannot be determined as 5 of the 8 counters recorded no or insufficient data.

Social Prescribing Pilot

Along with Sefton Council and the Liverpool City Region Combined Authority, the council is currently bidding for funding to establish an active travel social prescribing pilot focused on the Four Acre area. The scheme will allow health professionals to prescribe active travel (either through courses or everyday community use) and work with people in a targeted way to address poor health as a result of inactivity. A funding announcement from government is expected in Summer 2022.

Future Infrastructure

St Helens Borough Council is currently developing design drawings for three new high-quality walking and cycling routes across the Borough, along with a local network plan which will set out future priorities for development and investment. It is anticipated these will be subject to public consultation in early summer 2022 and published in early 2023.

Smart Driving

St Helens Council employed the use of smart driving technology and in cab heating to reduce idling and encourage more efficient driving and was completed in 2021.

Planning

A list of major applications determined in 2021 is outlined in Appendix F, applications were screened for air quality impacts and no applications were deemed to have a significant impact after mitigation.

Fleet Management

The planned fleet management renewal program has continued with Euro VI vehicles replacing Euro III.

In September 2019 cabinet approved an additional £2,891m for fleet replacement over the next 3 years.

All small to medium sized vehicle are to be replaced with electrically driven zero emission systems where operationally possible. It is likely to be delayed due to previous COVID Impacts.

Part L of the Building Regulations

St Helens are continuing to enforce building regulations and aware of future changes likely to be taking place as a result of the changes/update in Part L.

Tree Planting

Throughout 2021, 424 trees of varying species have been planted across the Borough. These additional trees will assist in the removal of gaseous pollutants in the air, as well as helping to reduce carbon dioxide.

Clean Air Zones

Clean Air Zones for Greater Manchester were proposed for Spring 2022 in Manchester, however, this has been delayed. The Clean Air Zone for Liverpool City has been proposed for the end of 2022/2023 in Liverpool. At present in Liverpool, the Clean Air Zone proposals are to introduce congestion charging for both commercial and domestic vehicles.

The principal concerns raised regarding wider impacts is that the air quality issues in Manchester and Liverpool will be displaced to neighbouring authorities such as St Helens, which borders the Greater Manchester areas. Regional commercial fleet operators (e.g. taxis, deliveries etc.) may move their more polluting vehicles into St Helens or vehicles may reroute through St Helens to avoid incurring charges.

St Helens will continue to engage with the local authorities concerned as part of the wider consultation exercises and monitor any air quality changes this may have.

In 2021, St Helens Council were successful in winning £650,000 from a Defra grant. The money will be used towards a vehicle retrofit/ replacement scheme within St Helens borough. When the Greater Manchester Clean Air Zone scheme is in place, the grant money will assist in mitigating any negative impacts the Clean Air Zone may have on air quality within the St Helens region.

Public Information

Two new air quality websites were launched in November 2019 and were maintained during 2021. One a public information website is for the Liverpool Region, and another is an educational website for schools and parents. These can be found at www.letscleartheairlcr.co.uk and https://kids.letscleartheairlcr.co.uk/

The Council has an initiative called Liveable Streets aimed at improving streets for walking and cycling to encourage uptake. Comments on 'problem areas' and improvements can be

left and are used to inform funding bids and works aimed at improving walking/cycling infrastructure improvements.

Conclusions and Priorities

The general trend in NO₂ over the last five years has been a slow downward trend. However, due to the traffic reductions in 2020 due to a response to the COVID-19 pandemic, in 2021, there have been some increases in NO₂ levels which was expected as travel increases occurred as lock down measures were lifted.

In AQMA 1 all results are now below 40µg/m³. All concentrations at properties in this AQMA are below the national objective for annual mean NO₂.

In AQMA 2, annual mean concentrations of NO₂ have slowly reduced and have all been below the measured concentrations since 2017. There are no measured exceedances within AQMA 2 at any location.

The monitored results from AQMA 3 (Borough Road) show fluctuating results and not a downward trend, this is probably due to the local conditions (large incline and street canyon) as the exceedances are only seen where terraced houses line either side of the street at diffusion tube locations 19 and 24. The fluctuations over the past 5 years are likely due to the impacted by the weather and not interventions. More local targeted interventions are being planned in this area to secure improvements in air quality.

The general trend is downwards in AQMA 4 and all monitored data in AQMA 4 is below the national objective for annual mean NO₂. The monitored levels of Nitrogen dioxide in this location have been below the national objective for five years. However, due to planning applications being granted, in which traffic flow through the AQMA could be affected, it is proposed to maintain the AQMA.

The main priority for reducing air quality in St Helens will be minimising impacts from new developments and providing targeted interventions to reduce Nitrogen dioxide. In 2022, the council will begin the process of updating the Air Quality Action Plan (AQAP) and to implement as many measures as possible to reduce nitrogen dioxide emissions.

For AQMA 3 (Borough Road), the challenge will be finding innovative solutions to improve air quality in AQMA 3 and implementing all the projects in the draft action plan with limited budget and resources.

Local Engagement and How to get Involved

An educational air quality website for children and schools was launched in 2019. A launch event with schools and key decision makers was held in Liverpool. Packs were sent out to all schools within the Liverpool City Region and a programme for schools to undertake their own air quality assessments using diffusion tubes was launched at the beginning of 2020. Further engagement with schools was placed on hold due to the restrictions in place as a result of the pandemic. It is hoped that the website will enhance the learning and engagement around air quality issues in schools and further engagement with schools can occur in the future. The website can be found at https://kids.letscleartheairlcr.co.uk/.

An air quality website for the public within the Liverpool City Region was also launched and maintained in 2020. This can be found at www.letscleartheairLCR.co.uk and contains information and publications relating to air quality within the LCR. Local air quality information can also be found on the councils dedicated web pages at https://www.sthelens.gov.uk/business/environmental-health/environmental-protection/air-quality/.

Local Responsibilities and Commitment

This ASR was prepared by the Place Services Department of St Helens Council with the support and agreement of the following officers and departments:

- Tony Smith Head of Regulation (Communities Department)
- Jack Mayhew Principal Transport Officer (Policy, Place Services)

- John Boden Park and Area Landscape Manager (Operations Department)
- Gareth Tyson Manager Network Management (Urban Traffic Control / Street Lighting) (Operations Department)
- Gila Middleton Senior Planning Officer (Development Control) (Place Services)
- John Murdock Building Control Manager (Strategic Growth Department)
- Geoff Hughes Technical & Compliance Officer (Operations Department)

This ASR has been approved by:

Tony Smith, Head of Regulation (Communities Department) and Ruth du Plessis, Director of Public Health (Public Health Department) have approved the ASR

Head of Regulation

A & Should

Director of Public Health

This ASR has been signed off by a Director of Public Health.

If you have any comments on this ASR, please send them to Emma Woodrow at:

Wesley House, Corporation Street, St Helens, WA10 1HE

07935 010666

emmawoodrow@sthelens.gov.uk

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1 Local Air Quality Management

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

The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where an exceedance is considered likely the local authority must declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives. This Annual Status Report (ASR) is an annual requirement showing the strategies employed by St Helens 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 12 months setting out measures it intends to put in place in pursuit of compliance with the objectives.

A summary of AQMAs declared by St Helens Council can be found in Table 2.1. The table presents a description of the four AQMAs that are currently designated within St Helens. 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 designations are as follows:

NO₂ annual mean.

Table 2.1 – Declared Air Quality Management Areas

AQMA Name			One Line Description	Is air quality in the AQMA influenced by roads controlled by National Highways?	Level of Exceedance: Declaration	Level of Exceedance: Current Year	Name and Date of AQAP Publication	Web Link to AQAP
AQMA 1 M6 Motorway	23rd April 2009	NO ₂ Annual Mean	An area encompassing the M6 running its entire length through the Borough	YES	65	34	AQAP for AQMA 1, March 2013	In draft
AQMA 2 Newton le Willows High Street	Newton le 23rd April NO ₂ Annual along le Willows Mean the ju		Residential properties along High Street Newton le Willows (A49) between the junctions of Ashton Road and Church Street	NO	40.1	30	AQAP for AQMA 2, March 2013	In draft
AQMA 3 Borough Road	AQMA 3 25th November NO ₂ Annual Mean		An area encompassing residential properties along Borough Road between the junctions of Westfield Street and Prescot Road, including 5-9 Alexandra Drive and 1-17 Prescot Road	NO	64	49.7*	AQAP for AQMA 3, March 2013	In draft
AQMA 4 Linkway	AQMA 4 25th NO ₂ Annual Residential adjacent t		Residential development adjacent to the Linkway (A570)	NO	42.11	26	AQAP for AQMA 4, March 2013	In draft

^{*}Diffusion Tube Data. Tubes 19 and 24.

[☑] St Helens Council confirm the information on UK-Air regarding their AQMA(s) is up to date.

[☒] St Helens Council confirm that all current AQAPs have been submitted to Defra.

2.2 Progress and Impact of Measures to address Air Quality in St Helens

Defra's appraisal of last year's ASR concluded priority interventions need to be given to AQMA 3 and a new AQAP should be prepared as the current one is out of date and focus on how compliance will be achieved in AQMA 3.

St Helens Council has taken forward a number of direct measures during the current reporting year of 2021 in pursuit of improving local air quality. Details of all measures completed, in progress or planned are set out in Table 2.2. Details of all measures are included within Table 2.2, with the type of measure and the progress St Helens Council have made during the reporting year of 2021 presented. Where there have been, or continue to be, barriers restricting the implementation of the measure, these are also presented within Table 2.2.

More detail on these measures can be found in their respective Action Plans. Key completed measures are:

- A580 Pewfall junction improvement scheme which aims to reduce traffic queuing in addition to dedicated cycle and pedestrian crossing which was completed in October 2020.
- A57 Sherdley Roundabout improvement scheme will provide toucan crossing facilities widened footways and widened lane widths to improve traffic flows.
- A57 Warrington Road safety improvement scheme to smooth flow and provide pedestrian and cycling facilities.
- Sustainable Transport Enhancement Package (STEP) was a six-year programme which ended in March 2021 aimed at delivering new cycle routes to increase cycling and walking.
- Sustainable Urban Development Scheme ended December 2021. This scheme was designed to construct new cycle paths.

St Helens Council expects the following measures to be completed over the course of the next reporting year:

• Emergency Active Travel Fund Tranche 1 and 2 to create cycling improvements, increase the number of cycling and walking trips and to deliver school; streets at three schools in the borough.

 Smart driving technology project and in cab heating to reduce idling and encourage more efficient driving and was completed in 2021.

St Helen's priorities for the coming year are:

- Updating the Air Quality Action Plan
- Using the Defra grant funds for the vehicle retrofit/ replacement scheme

St Helens Council worked to implement these measures in partnership with the following stakeholders during 2021:

• Liverpool City Region & Cheshire Air Quality Technical Group (AQTECH)

The principal challenges and barriers to implementation that St Helens anticipates facing are funding and resource challenges.

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

 Upgrade to smart motorway on M6 between junctions 22 and 24 due to delays from Highways England.

St Helens Council anticipates that the measures stated above and in Table 2.2 will achieve compliance in the following AQMAs:

- High Street, Newton
- M6/Southworth Road
- St Helens Linkway.

Whilst the measures stated above and in Table 2.2 will help to contribute towards compliance, St Helens Council anticipates that further additional measures not yet prescribed will be required in subsequent years to achieve compliance and enable the revocation of Borough Road AQMA.

Table 2.2 – Progress on Measures to Improve Air Quality

Measure No.	Measure	Category	Classification	Year Measure Introduced	Estimated / Actual Completion Year	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
1	Acoustic/AQ barrier on M6 flyover	Traffic Management	Strategic highway improvements, Re- prioritising road space away from cars, including Access management, Selective vehicle priority, bus priority, high vehicle occupancy lane	Planning phase	2021/2022	Highways England	HE	unknown at this present time	unknown at this present time	unknown at this present time	unknown at this present time	unknown at this present time	Monitored NO₂ levels	In planning phase	St Helens Council In discussion – dependent on results of planning phase
2	Use of hard shoulder running (M6 J21a to J24)	Traffic Management	UTC, Congestion management, traffic reduction	Planning phase	2021/2022	Highways England	HE	unknown at this present time	unknown at this present time	unknown at this present time	unknown at this present time	unknown at this present time	Monitored NO ₂ levels	In planning phase	Other studies have shown hard shoulder running to increase pollutants at close by receptors, needs to be done in conjunction with mitigating measures. Dependent upon HE.
3	Anti-idling campaign	Traffic Management	Anti-idling enforcement	2018	Soft approach ongoing, second phase planned	St Helens Council	Local Authority	unknown at this present time	unknown at this present time	unknown at this present time	unknown at this present time	unknown at this present time	Reducing background emissions	To adopt legislation and authorise key services to enforce anti- idling legislation	None
4	Optimise flow on key routes (SCOOT)	Traffic Management	UTC, Congestion management, traffic reduction	2016	2020	St Helens Council	Complete	unknown at this present time	unknown at this present time	unknown at this present time	unknown at this present time	unknown at this present time	Reducing emissions on key routes. Reduction of between 2.1- 3.3ug/m3 at key receptors over last 5 years.	Phase 1 complete on A580 phase 2 ongoing	Length of works
5	Travel awareness campaign	Promoting Travel Alternatives	Promotion of walking	2017	Ongoing	St Helens Council, Living Streets	Ongoing	unknown at this present time	unknown at this present time	unknown at this present time	unknown at this present time	unknown at this present time	Number of children walking to school/work	Participate in Arrive Happy and Living Streets campaigns.	Funding streams for future years.
6	Cycling promotion	Promoting Travel Alternatives	Promotion of cycling	2019	Ongoing	Local Authority transport dept.	STEP funding	unknown at this present time	unknown at this present time	unknown at this present time	unknown at this present time	unknown at this present time	Number of people using cycle hubs and purchasing bikes through	Off road cycle programme extended. Cycle hub in Sherdley Park. Participants in	Funding streams for future years.

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Measure No.	Measure	Category	Classification	Year Measure Introduced	Estimated / Actual Completion Year	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
													the cycle to work scheme.	cycle to work scheme.	
7	Major Junction Improvements at Windle Island, Pewfall and St Helens Junction	Traffic Management	UTC, Congestion management, traffic reduction	2019	Implementation ongoing	Local Authority Transport dept.	Local Authority	unknown at this present time	unknown at this present time	unknown at this present time	unknown at this present time	unknown at this present time	Queue times, NO ₂ reduction	Implementation ongoing	Funding streams for future years.
8	Eco driving	Vehicle Fleet Efficiency	Driver training and ECO driving aids	2017	Complete	St Helens Council	Energy Saving trust/Defra funding	unknown at this present time	unknown at this present time	unknown at this present time	unknown at this present time	unknown at this present time	Fuel efficiency	Completed	None
9	Fleet Efficiency improvements	Promoting Low Emission Transport	Company Vehicle Procurement - Prioritising uptake of low emission vehicles	2017	Ongoing	St Helens Council	Local Authority	unknown at this present time	unknown at this present time	unknown at this present time	unknown at this present time	unknown at this present time	Fuel efficiency	Ongoing	Funding streams for future years.
10	Green the taxi fleet	Promoting Low Emission Transport	Taxi Licensing conditions	2021	2021	Local Authority Licensing dept with other Merseyside LAs	Local Authority.	unknown at this present time	unknown at this present time	unknown at this present time	unknown at this present time	unknown at this present time	Reduce emissions on major routes	Dependent upon licensing policy	Planning phase
11	Supplementary planning guidance	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2020	2024	Local Authority Planning dept	Local Authority	unknown at this present time	unknown at this present time	unknown at this present time	unknown at this present time	unknown at this present time	Mitigation measures, more sustainable development	Planning policy upgraded to include references to EVs and offsetting	Planning policy still in draft pending review.

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

As detailed in Policy Guidance LAQM.PG16 (Chapter 7), local authorities are expected to work towards reducing emissions and/or concentrations of PM_{2.5} (particulate matter with an aerodynamic diameter of 2.5µm or less). There is clear evidence that PM_{2.5} has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases.

St Helens is taking the following measures to address PM_{2.5}: Some of the measures within the action plan will address PM_{2.5} emissions, however additional measures put in place to specifically tackle emissions from PM_{2.5} are the enforcement of the Smoke control areas within St Helens. Most of the Borough is designated as a Smoke Control area. Officers give out advice and information to residents on DEFRA approved exempt appliances and the correct fuels to use.

The updated air quality action plan will implement as many measures as possible to tackle PM_{2.5} emissions.

Raise awareness of the correct disposal routes for waste, not to burn waste, also to compost green waste and we provide a green waste collection service.

Each year St Helens undertakes operation Good Guy to remove combustible materials, waste and bonfire materials from all public space, open ground, and gardens to limit the number of bonfires. St Helens advertise this, and residents are able to report build ups of waste to the council for removal.

We respond to complaints about commercial premises using burning as a method of waste disposal and respond to nuisance complaints about neighbours consistently burning waste under the Environmental Protection Act 1990.

St Helens Council actively promotes eco-driving which include the reduced braking and tyre wear which is a cause of PM_{2.5}.

All permitted premises and planning applications are encouraged to utilise gas fired boilers instead to diesel powered boilers to reduce the PM_{2.5} and PM₁₀ emissions.

As a statutory consultee on planning applications, we ask for dust management plans to limit the amount of dust on site, and to stop burning of any waste arising.

Information is available on the council website and is included in the educational website aimed at children and schools.

In 2022, St Helens, along with the Merseyside combined authority will be involved in the consultations of Environment Act Targets (in line with UK100 response). The responses will focus on the changes to the PM_{2.5} updated guidelines.

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

This section sets out the monitoring undertaken within 2021 by St Helens Council and how it compares with the relevant air quality objectives. In addition, monitoring results are presented for a five-year period between 2017 and 2021 to allow monitoring trends to be identified and discussed.

3.1 Summary of Monitoring Undertaken

3.1.1 Automatic Monitoring Sites

St Helens Council undertook automatic (continuous) monitoring at four sites during 2021. Table A.1 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. The https://www.ukairquality.net/ page presents automatic monitoring results for St Helens Council, 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.

3.1.2 Non-Automatic Monitoring Sites

St Helens Council undertook non- automatic (i.e. passive) monitoring of NO₂ at 32 sites during 2021. 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 (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 $40\mu g/m^3$. 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 2021 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 200µg/m³, not to be exceeded more than 18 times per year.

All monitoring results were below the annual mean for nitrogen dioxide at all the automatic monitoring sites and at all the diffusion tube locations except for the two diffusion tubes (T19 and T24) located at Borough Road in AQMA 3 where an annual exceedance of 49.7µg/m³ was recorded. This is the highest nitrogen dioxide level recorded over the past five years. No exceedances were found to be above the 60µg/m³ indicating that there are no exceedances of the 1- hour mean objective.

AQMAs 1 (M6), 2 (High Street) and 4 (Linkway) had no exceedances of the annual mean objective. There are no exceedances of the daily or annual mean objective in any of the other monitored locations.

It should be noted for the diffusion tube monitoring, the July and August results were not changed in line with the Defra calendar due to a postal issue. However, the monitoring period was still in line within the Defra approved timeframe of 4-5 weeks. As there was less than 75% data capture at DT 2, Skitters Grove, annualisation was carried out on this one diffusion tube. The other diffusion tubes had a data capture greater than 75% so annualisation was no required.

There are three sets of co-located duplicate diffusion tubes at the Linkway monitor, the Southworth Road monitor and the High Street monitor. There was poor overall precision with the diffusion tubes at Linkway, so this was excluded from the bias adjustment calculations. The bias adjustment was then calculated using the Southworth Road monitor and the High Street monitor, resulting in a factor of 0.93. This value was higher than the 0.78 national factor, therefore the worst-case factor was used for the final diffusion tube results.

3.2.2 Particulate Matter (PM₁₀)

Table A.6 in Appendix A: Monitoring Results compares the ratified and adjusted monitored PM_{10} annual mean concentrations for the past five years with the air quality objective of $40\mu g/m^3$.

Table A.7 in Appendix A compares the ratified continuous monitored PM_{10} daily mean concentrations for the past five years with the air quality objective of $50\mu g/m^3$, not to be exceeded more than 35 times per year.

The monitored annual mean concentration for 2021 at the Linkway analyser (LW) was 18 μ g/m3. There was one exceedance of the PM₁₀ daily mean. These results are exactly the same as in 2020.

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) (1)	Distance to kerb of nearest road (m) ⁽²⁾	Inlet Height (m)
LW	St Helens Linkway	Roadside	350815	395260	NO ₂ , PM ₁₀	YES AQMA 4	Chemiluminescent; BAM	165	5.35	2.44
SR	St Helens Southworth Road	Roadside	360045	395643	NO ₂	YES AQMA1	Chemiluminescent	10	3.2	2
HS	St Helens High Street	Roadside	358975	395804	NO ₂	YES AQMA 2	Chemiluminescent	1.06	3.65	2
BR	St Helens Borough Road	Roadside	350403	394961	NO ₂	YES AQMA 3	Chemiluminescent	23	2.5	1.48

Notes:

- (1) 0m if the monitoring site is at a location of exposure (e.g. installed on the façade of a residential property).
- (2) N/A if not applicable

Table A.2 – 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)
1	170 Southworth Road	Roadside	360109	395661	NO ₂	No	0.0	16.3	No	2.0
2	1 Skitters Grove	Roadside	356549	399577	NO ₂	No	0.0	22.8	No	2.0
3	Taylor Park	Urban Background	349485	394766	NO ₂	No	32.2	N/A	No	2.4
4	27 Syston Avenue	Suburban	352451	396735	NO ₂	No	0.0	12.9	No	1.7
5	151 west End Road	Suburban	353891	396714	NO ₂	No	0.0	4.5	No	1.9
6	Parkside Lamppost	Suburban	359498	394646	NO ₂	No	45.4	1.7	No	2.4
7, 10, 31	160 Southworth Road	Roadside	350403	394961	NO ₂	No	10.0	3.2	Yes	2.0
8	157 high Street	Roadside	358774	395880	NO ₂	Yes, Newton High Street AQMA (No.2)	0.0	10.6	No	1.9
9	3 Waterworks cottages	Roadside	359915	395639	NO ₂	No	0.0	11.5	No	1.8
11	Southworth Road LP 11	Roadside	360065	395653	NO ₂	No	0.0	4.6	No	1.9
13	22 Union Bank Lane	Roadside	352391	390301	NO ₂	No	0.0	7.6	No	1.8
14, 23	19 High Street	Roadside	359147	395705	NO ₂	Yes, Newton High Street AQMA (No.2)	0.0	5.9	No	2.4
15	2 Parkside Cottages	Roadside	358220	397077	NO ₂	No	0.0	27.4	No	1.7
16	297 Liverpool Road	Roadside	354377	397475	NO ₂	No	0.0	14.3	No	2.1

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)
17	446 Liverpool Road	Roadside	354403	397561	NO ₂	No	0.0	7.9	No	1.8
18, 22	Linkway Monitor	Roadside	350815	395265	NO ₂	Yes, AQMA No. 4 (Reflection Court)	165.0	5.4	Yes	2.4
19, 24	55 Borough Road	Roadside	350438	395005	NO ₂	Yes, AQMA No.3 (Borough Rd)	0.0	2.6	No	2.3
20	33 Langholm Road	Suburban	355322	399625	NO ₂	No	0.0	2.6	No	2.3
21	24 Greenfield Road	Roadside	350135	396128	NO ₂	No	0.0	6.2	No	1.8
25, 32	high Street Monitor	Roadside	358975	395804	NO ₂	Yes, Newton High Street AQMA (No.2)	1.1	3.7	Yes	2.6
26	33 Blackbrook Road	Roadside	353129	396240	NO ₂	No	0.0	6.4	No	1.9
27	51 Carr Mill Road	Roadside	352336	397653	NO ₂	No	0.0	13.6	No	1.1
28	206 Borough Road	Roadside	350156	394848	NO ₂	Yes, AQMA No.3 (Borough Rd)	0.0	6.4	No	1.9
29	25 Prescot Road	Roadside	350456	395135	NO ₂	No	0.0	1.9	No	2.4
30	4 Union Bank Lane	Roadside	352262	390226	NO ₂	No	0.0	7.5	No	1.9
33	Warrington Road, Rainhill Stoops	Roadside	350386	389936	NO ₂	No	5.1	11.9	No	1.9

Notes:

- (1) 0m if the monitoring site is at a location of exposure (e.g. installed on the façade of a residential property).
- (2) N/A if not applicable.

Table A.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 2021 (%) ⁽²⁾	2017	2018	2019	2020	2021
LW	350815	395260	Roadside	100	99	34	33	33	25	26
SR	360045	395643	Roadside	100	99.7	50	45	43	34	34
HS	358975	395804	Roadside	100	84.2	31	35	31	30	30
BR	350403	394961	Roadside	100	94.2	29	30	29	26	24

[☑] Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG16.

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

Notes:

The annual mean concentrations are presented as µg/m³.

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

All means have been "annualised" as per LAQM.TG16 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 2021 (%) ⁽²⁾	2017	2018	2019	2020	2021
1	360109	395661	Roadside	100	100.0	26.5	25.0	24.9	23.2	24.1
2	356549	399577	Roadside	66.7	66.7	25.0	25.9	24.7	19.2	23.4
3	349485	394766	Urban Background	90.4	90.4	13.5	13.2	14.3	11.2	14.0
4	352451	396735	Suburban	100	100.0	22.6	20.5	20.9	18.8	23.3
5	353891	396714	Suburban	100	100.0	21.9	22.3	22.5	20.2	21.8
6	359498	394646	Suburban	100	100.0	23.6	21.3	21.5	17.3	20.9
7, 10, 31	350403	394961	Roadside	92.3	92.3	37.7	34.9	31.4	31.5	36.5
8	358774	395880	Roadside	100	100.0	22.5	24.1	23.0	19.8	23.4
9	359915	395639	Roadside	92.1	92.1	20.9	21.8	21.7	16.7	21.2
11	360065	395653	Roadside	100	100.0			34.0	31.7	35.1
13	352391	390301	Roadside	92.6	92.6	24.6	24.4	22.2	19.0	22.5
14, 23	359147	395705	Roadside	100	100.0	33.3	31.6	30.7	28.0	34.4
15	358220	397077	Roadside	100	100.0	31.4	28.4	27.1	25.9	26.6
16	354377	397475	Roadside	100	100.0	22.3	22.2	20.7	18.2	22.0
17	354403	397561	Roadside	100	100.0	29.3	27.5	28.4	23.1	26.4
18, 22	350815	395265	Roadside	100	100.0	33.9	30.4	30.7	25.4	30.8
19, 24	350438	395005	Roadside	100	100.0	42.9	48.1	44.3	42.7	49.7
20	355322	399625	Suburban	100	100.0			15.0	13.5	14.1
21	350135	396128	Roadside	100	100.0	23.7	23.4	23.8	21.1	25.7
25, 32	358975	395804	Roadside	100	100.0	30.7	31.5	30.0	24.7	31.2
26	353129	396240	Roadside	100	100.0	27.2	27.5	25.0	24.2	28.5
27	352336	397653	Roadside	100	100.0		19.5	22.2	18.7	24.3
28	350156	394848	Roadside	100	100.0	25.9	25.7	25.2	22.1	27.3
29	350456	395135	Roadside	100	100.0	25.0	25.5	25.6	21.4	25.9
30	352262	390226	Roadside	100	100.0	22.8	20.7	19.8	17.4	20.4
33	350386	389936	Roadside	100	100.0	30.2	33.4	30.7	27.1	30.4

[☑] Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG16.

[☑] 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 $\mu g/m^3$.

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

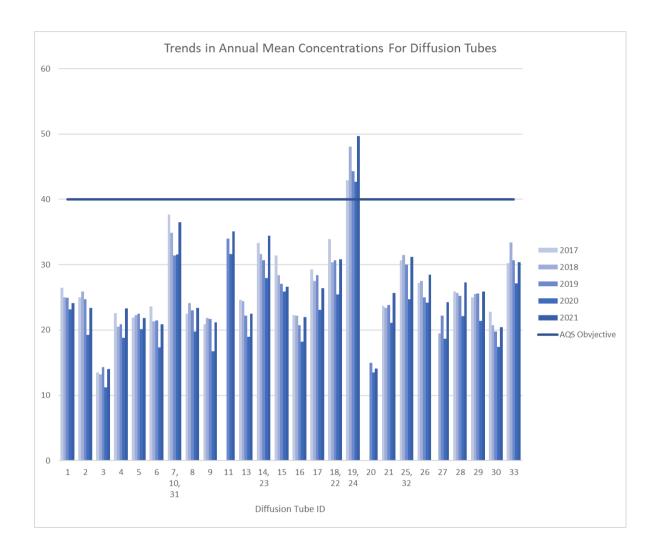
 NO_2 annual means exceeding $60\mu g/m^3$, indicating a potential exceedance of the NO_2 1-hour mean objective are shown in **bold and underlined**.

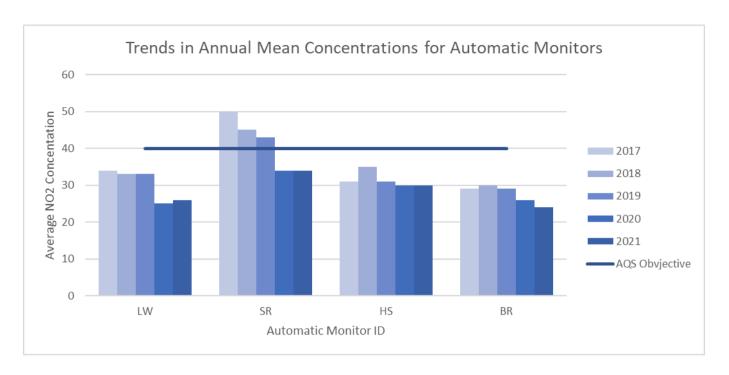
Means for diffusion tubes have been corrected for bias. All means have been "annualised" as per LAQM.TG16 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

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





For the NO₂ annual mean concentrations for diffusion tubes there has been a general increase in NO₂ levels since 2020, which was expected due to traffic increases from 2020 to 2021 as the United Kingdom ended COVID restriction and travel increased. There are no exceedances of the annual mean objective in 2021 apart from diffusion tubes 19 and 24.

For the NO₂ annual mean concentrations for the four automatic monitors, there have been no exceedances over the past five years with the exception of Southworth Road where there were exceedances every year except for 2020 and 2021. Southworth Road and Linkways NO₂ annual mean concentrations have remained identical. There has been an increase at Linkway of 1 µg/m³ and a reduction in 2µg/m³ at High Street. There is a general trend of a plateau across the automatic monitors.

Table A.5 – 1-Hour Mean NO₂ Monitoring Results, Number of 1-Hour Means > 200μg/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 2021 (%) ⁽²⁾	2017	2018	2019	2020	2021
LW	350815	395260	Roadside	100	98	0	0	0	0	0
SR	360045	395643	Roadside	100	99	3	0	0	0	0
HS	358975	395804	Roadside	100	92.5	0	0	0	0	0
BR	350403	394961	Roadside	100	99.3	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%).

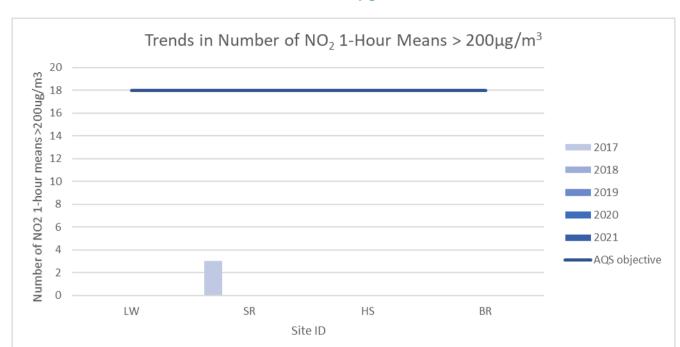


Figure A.2 – Trends in Number of NO₂ 1-Hour Means > 200μg/m³

There have been no exceedances greater than 200 $\mu g/m^3$ in the past five years apart from Southworth Road in which there were three exceedances in 2017. This is below the annual objective of 18 times per year.

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 2021 (%) ⁽²⁾	2017	2018	2019	2020	2021
AN1	350815	395260	Roadside	100	97	16	18	20	18	18

☑ Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG16.

Notes:

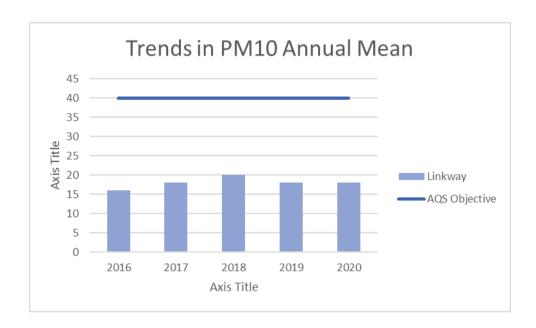
The annual mean concentrations are presented as $\mu g/m^3$.

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

All means have been "annualised" as per LAQM.TG16 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

- (1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.
- (2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Figure A.3 – Trends in Annual Mean PM₁₀ Concentrations



For the past five years, the annual mean concentration of PM_{10} has been at less than half the concentration of the 40 μ g/m³ objective at the Linkway automatic monitor.

Table A.7 – 24-Hour Mean PM₁₀ Monitoring Results, Number of PM₁₀ 24-Hour Means > 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 2021 (%) ⁽²⁾	2017	2018	2019	2020	2021
AN1	350815	395260	Roadside	100	97	4	1	9	1	1

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%).

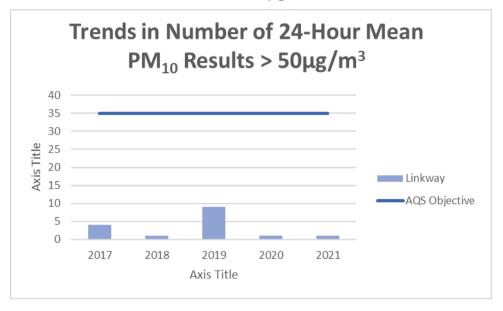


Figure A.4 – Trends in Number of 24-Hour Mean PM₁₀ Results > 50μg/m³

Over the past five years, the number of 24-hour mean PM_{10} concentrations greater than 50 μ g/m³ are below the objective of 35 times a year. The highest number of times this was recorded was in 2019, where 50 μ g/m³ was recorded 9 times in the year. In 2021, this was only recorded once.

Appendix B: Full Monthly Diffusion Tube Results for 2021

Table B.1 – NO₂ 2021 Diffusion Tube Results (μg/m³)

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Easting)	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted	Annual Mean: Distance Corrected to Nearest Exposure	Comment
1	360109	395661	37.5	28.8	28.6	23.3	21.8	20.0	18.4	18.7	24.0	27.5	31.7	30.6	25.9	24.1		
2	356549	399577			18.4	26.5	26.3	17.7	16.8	25.4	27.6	22.8			22.7	23.4		
3	349485	394766	13.7	16.0	13.2		14.6	10.4	12.0	11.8	18.9	15.9	16.7	22.2	15.0	14.0		
4	352451	396735	37.5	25.5	32.0	28.1	20.6	14.9	14.3	12.1	20.2	27.1	33.3	34.5	25.0	23.3		
5	353891	396714	37.0	27.0	22.3	23.3	19.1	16.5	16.6	18.0	26.4	24.7	27.1	22.7	23.4	21.8		
6	359498	394646	33.2	25.4	22.0	22.6	19.9	15.3	16.5	18.6	24.5	23.2	21.8	26.1	22.4	20.9		
7, 10, 31	350403	394961		40.6	37.8	35.1	40.2	27.4	32.3	47.3	42.4	42.7	41.2	44.1	39.2	36.5	29.6	
8	358774	395880	34.3	27.1	23.9	25.9	21.2	17.3	20.0	18.1	28.0	22.1	30.7	33.0	25.1	23.4		
9	359915	395639	34.2	27.6	18.3	26.4		12.1	16.9	17.5	24.4	18.1	25.1	30.5	22.8	21.2		
11	360065	395653	50.2	31.2	45.3	31.2	39.8	26.0	30.3	22.6	39.8	49.9	42.3	44.1	37.7	35.1		
13	352391	390301	32.9	23.9	22.1	26.6	21.6	22.1	23.1	24.4		18.6	27.7	23.4	24.2	22.5		
14, 23	359147	395705	45.5	38.9	34.8	33.1	34.7	27.9	28.4	24.8	41.7	38.6	42.1	54.2	37.0	34.4		
15	358220	397077	41.1	32.8	31.8	25.9	26.3	21.8	22.3	21.6	29.9	31.4	23.2	35.2	28.6	26.6		
16	354377	397475	33.3	26.6	22.8	25.8	21.1	16.5	20.0	21.6	22.4	17.2	27.8	28.7	23.7	22.0		
17	354403	397561	40.7	36.8	27.7	28.9	25.8	18.6	16.8	23.2	30.2	30.4	24.0	38.0	28.4	26.4		
18, 22	350815	395265	44.2	40.8	32.8	30.5	31.8	23.5	25.4	24.5	35.8	33.8	38.2	35.9	33.1	30.8		
19, 24	350438	395005	63.0	65.3	48.0	54.0	45.1	43.3	42.6	48.2	61.0	54.6	56.3	60.6	53.5	49.7		
20	355322	399625	21.5	24.1	14.2	12.7	11.8	8.5	8.5	9.7	15.9	14.8	16.7	23.1	15.1	14.1		
21	350135	396128	38.3	37.7	23.0	27.2	23.5	19.0	18.6	23.1	30.5	26.2	30.0	34.5	27.6	25.7		
25, 32	358975	395804	45.3	37.6	29.7	35.6	28.1	26.2	26.2	29.1	38.8	29.3	36.6	40.1	33.5	31.2		
26	353129	396240	44.0	35.0	32.6	34.4	28.2	25.3	22.0	27.8	32.3	22.3	27.1	37.1	30.7	28.5		
27	352336	397653	35.4	35.5	20.0	25.5	28.5	21.0	13.8	20.6	29.6	24.8	24.5	34.3	26.1	24.3		
28	350156	394848	39.8	32.5	27.5	32.4	26.9	22.3	23.8	22.9	30.8	26.4	35.2	32.0	29.4	27.3		
29	350456	395135	44.6	38.4	25.1	25.5	23.2	17.7	16.0	23.1	27.8	23.9	32.0	36.6	27.8	25.9		
30	352262	390226	31.6	22.7	22.0	22.9	19.1	15.3	17.6	17.3	24.8	18.5	25.8	25.2	21.9	20.4		
33	350386	389936	40.6	41.7	33.9	32.1	33.0	24.4	22.3	29.2	39.0	31.8	34.4	30.1	32.7	30.4		

- ☑ All erroneous data has been removed from the NO₂ diffusion tube dataset presented in Table B.1.
- ☑ Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG16.
- **I** Local bias adjustment factor used.
- ☐ National bias adjustment factor used.
- **☒** Where applicable, data has been distance corrected for relevant exposure in the final column.
- ☑ St Helens Council confirm that all 2021 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**.

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See Appendix C for details on bias adjustment and annualisation.

LAQM Annual Status Report 2022

Appendix C: Supporting Technical Information / Air Quality Monitoring Data QA/QC

New or Changed Sources Identified Within St Helens Council During 2021

St Helens Council has not identified any new sources relating to air quality within the reporting year of 2021.

Additional Air Quality Works Undertaken by St Helens Council During 2021

St Helens Council has not completed any additional works within the reporting year of 2021.

QA/QC of Diffusion Tube Monitoring

Quality Assurance

SOCOTEC strives for total customer satisfaction in all areas of analytical chemistry and associated project management, development and consultancy.

All of our services are covered by approval to the ISO 9001 management system. Diffusion tube analysis carries UKAS accreditation to the international standard BS EN ISO/IEC 17025 (Testing Laboratory No. 1252) and our Environmental Management System is accredited to ISO14001.

Copies of our ISO 9001, ISO14001 and ISO 17025(UKAS) certificates and schedules and are available if required.

With specific regard to diffusion tubes;

SOCOTEC have been a participant in the AIR PT (and its predecessor the WASP scheme) since its inception and have always maintained the highest achievable laboratory rating (this was previously 'Good' and more recently has been altered to 'Satisfactory').

In order to achieve the top rating of 'Satisfactory' a laboratory should achieve a Z–score of <2. SOCOTEC achieved an average Z-score of 0.27 in 2019.

NO₂ Diffusion Tube Analysis

Accreditations

The manufacture and analysis of the NO₂ diffusion tubes is covered by our UKAS accreditation. Our method also meets the requirements laid out in the UK's 'Diffusion tubes for ambient NO₂ monitoring: Practical guidance.'

As well as the AIR Pt scheme (detailed above) we also take part in the annual EMEP interlab comparison and the Marylebone Road inter-laboratory comparison scheme, again achieving good results. Andy Parish, the Production Manager for the laboratory, was also a member of the UK's working group for air quality and associated laboratory analysis.

In-house quality procedures dictate that we run one quality control sample for every 10 samples analysed. We monitor this data for statistical anomalies utilising the Shewhart system for statistical process control.

Proposed Delivery Schedule

Tubes are typically sent out 7-14 days before the scheduled changeover date (as defined by the UK Air Quality Monitoring Calendar), although we are happy to dispatch the tubes on dates specified by the customer.

The harmonised NO₂ guidance specifies that tubes should be sent out, exposed, returned and analysed within 4 months of manufacture. Therefore, we would advise that tubes are not sent more than 1 month in advance.

In the unlikely event of a damaged tube being received, SOCOTEC will send out replacement tubes via next day delivery.

Turnaround Times

Our quoted analytical turnaround time is 20 working days from receipt, however the laboratory typically achieves a delivery of <10 working days.

Contingency

Currently, the diffusion tube laboratory has 3 full time staff operating in this area in order to provide sufficient resource to manage current workloads with additional laboratory staff available if required.

The laboratory typically analyses in the region of 6000 tubes per month for NO₂ diffusion tube analysis, and has capacity to process several 1000 more tubes per month

Format of Results

We operate a paper-free reporting system, with results being emailed. A signed hardcopy is kept in our records, and is available on request.

Methodology for Analysis

Having been involved with diffusion tubes since their original development, the laboratory has 25+ years of experience of analysing NO₂ diffusion tubes.

The two main analytical techniques for the determination of nitrite are lon chromatography and Colorimetric analysis. Ion chromatography tends to have higher running costs, and is less robust than colorimetric analysis when measuring nitrite, so we have opted to carry out the analysis using colorimetric techniques. This is also the industry standard.

Colorimetric analysis can be carried out manually or automated utilising either a continuous flow, or discrete analyser. SOCOTEC use a continuous flow automated system, for the

following reasons:

Colorimetric analysis is dependent on a reaction between the reagents and analyte (NO₂)

creating a measurable colour change – in this case violet/purple. However this colour

change does not have long term stability so it is important that all analysis is carried out on

a like for like basis. In essence this means the volume of reagents added and reaction time

have to be carefully controlled, in order to achieve consistent results.

The advantage of the automated system is that the addition of reagents, and the time

allowed for colour change are all automated, so all samples and standards are treated

identically, which in turn reduces the risk of data inconsistencies.

We choose to use a segmented flow system (SFA) as opposed to a discrete system purely

because SFAs are designed for high volume throughput, whereas discrete instruments are

more oriented towards low volume multiple analyte analysis.

<u>Diffusion Tube Performance Summary 2019:</u>

Tube Type:

50% Acetone: 50% TEA

Uncertainty:

"Diffusion Tubes for Ambient NO₂ Monitoring: Practical Guidance"

categorises diffusion tubes as an indicative method, and as such the

uncertainty is defined as $\pm 25\%$.

During in field intercomparisons, SOCOTEC's diffusion tubes

performed with

a mean precision (CoV) of ±6%.

Quality Control:

A quality control (QC) sample of known concentration is run with the

samples. The data generated is then assessed using a

Shewhart control

chart to determine the process is under statistical

33

control.

St Helens Borough Council

Analytical Repeatability: In 2019 7250+ QC samples were analysed, achieving a relative

standard deviation of 0.90%

Confidence Intervals: $2\sigma \pm 1.79\%$

 $3\sigma \pm 2.69\%$

Limit of Detection: The analytical limit of detection is 0.03µg NO₂.

Over a 4-week exposure this would approximate to 0.6µg/m³,

or 0.3ppb

Pricing

SOCOTEC operates an inclusive and transparent pricing policy with the price quoted covering the manufacture, supply and analysis of the NO₂ diffusion tubes as well as the issuing of the report. This price also includes our postage costs, the calculation of exposure times and the re-issuing of reports (should any become lost). Please note that the price does not include the postage costs when returning the tubes for analysis to the laboratory.

For this specific project, please see the quotation attached.

Contact Details

The primary contact for this project would be: David Young – Senior Analyst

Address: Unit 12, Moorbrook

Southmead Industrial Estate

Didcot

Oxfordshire

OX11 7HP

Telephone: +44 (0) 1235 750730

Email david.young@socotec.com

Group email: DiffusionTubes@socotec.com

Diffusion Tube Annualisation

Eight months of data was captured at DT2, located at Skitters Grove. Annualisation was carried out at this location only using the data processing tool provided by Defra.

All remaining diffusion tube monitoring locations within St Helens recorded data capture of 75% therefore it was not required to annualise any monitoring data. In addition, any sites with a data capture below 25% do not require annualisation.

Diffusion Tube Bias Adjustment Factors

The diffusion tube data presented within the 2021 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.TG16 provides guidance with regard to the application of a bias adjustment factor to correct diffusion tube monitoring. Triplicate co-location studies can be used to determine a local bias factor based on the comparison of diffusion tube results with data taken from NO_x/NO₂ continuous analysers. Alternatively, the national database of diffusion tube co-location surveys provides bias factors for the relevant laboratory and preparation method.

St Helens Council have applied a local bias adjustment factor of 0.93 to the 2021 monitoring data. A summary of bias adjustment factors used by St Helens Council over the past five years is presented in Table C.1.

There is one set co-located triplicates at Southworth Road and two sets of co-located duplicate diffusion tubes at the Linkway monitor and the High Street monitor within St Helens. Even though the LAQM TG16 guidance states "To validate NO₂ diffusion tube data (bias adjustment), additional tubes should be exposed in triplicate at a suitable nearby automatic monitoring station, using the same monthly exposure periods as the other sites." the duplicate tubes results were inputted into the Defra diffusion tube data processing tool.

Due to there being a poor overall precision with the diffusion tubes at Linkway, this was excluded from the bias adjustment calculations. The bias adjustment was then calculated using the monitors at High Street and Borough Road only, resulting in a factor of 0.93. This value was higher than the 0.78 national factor, therefore the worst-case factor was used for the final diffusion tube results.

Table C.1 – Bias Adjustment Factor

Monitoring Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2021	Local	-	0.93
2020	Local	-	0.82
2019	National	06/20	0.75
2018	National	06/19	0.76
2017	National	06/18	0.77

NO₂ Fall-off with Distance from the Road

Wherever possible, monitoring locations are representative of exposure. However, where this is not possible, the NO₂ concentration at the nearest location relevant for exposure has been estimated using the Diffusion Tube Data Processing Tool/NO₂ fall-off with distance calculator available on the LAQM Support website. Where appropriate, non-automatic annual mean NO₂ concentrations corrected for distance are presented in Table B.1.

No diffusion tube NO₂ monitoring locations within St Helens Council required distance correction during 2021 with the exception of diffusion tubes 7, 10 and 31 which are triplicated with the Southworth monitor. Details of the calculation inputs can be seen in Table C.4.

QA/QC of Automatic Monitoring

Air quality measurements from the automatic instruments are validated and ratified by Air Quality Data Management (AQDM) http://www.aqdm.co.uk to the standards described in the Local Air Quality Management – Technical Guidance LAQM (TG16) https://laqm.defra.gov.uk/technical-guidance.

Validation

This process operates on data during the data collection stage. All data are continually screened algorithmically and manually for anomalies. There are several techniques designed to discover spurious and unusual measurements within a very large dataset. These anomalies may be due to equipment failure, human error, power failures, interference, or other disturbances. Automatic screening can only safely identify spurious results that need further manual investigation.

Raw data from the gaseous instruments (e.g. NOx, O₃, SO₂ and CO) are scaled into concentrations using the latest values derived from the manual and automatic calibrations. These instruments are not absolute and suffer drifts. Both the zero baseline (background) and the sensitivity may change over time. Regular calibrations with certified gas standards are used to measure the zero and sensitivity. However, these are only valid for the moment of the calibration since the instrument will continue to drift. Raw measurements from particulate instruments (e.g. PM₁₀ and PM_{2.5}) generally do not require scaling into concentrations. The original raw data are always preserved intact while the processed data are dynamically scaled and edited.

Ratification

This is the process that finalises the data to produce the measurements suitable for reporting. All available information is critically assessed so that the best data scaling is applied, and all anomalies are appropriately edited. Generally, this operates at three, six or twelve month intervals. However, unexpected faults can be identified during the instrument routine services or independent audits which are often at 6-monthly intervals. In practice, therefore, the data can only be fully ratified in 12-month or annual periods. The data processing performed during the three and six monthly cycles helps build a reliable dataset that is finalised at the end of the year.

There is a diverse range of additional information that can be essential to the correct understanding and editing of data anomalies. These may include

- the correct scaling of data
- ignoring calibrations that were poor e.g. a spent zero scrubber
- closely tracking rapid drifts or eliminating the data
- comparing the measurements with other pollutants and nearby sites
- corrections due to span cylinder drift

- corrections due to flow drifts for the particulate instruments
- corrections for ozone instrument sensitivity drifts
- eliminating measurements for NO₂ conversion inefficiencies
- eliminating periods where calibration gas is in the ambient dataset
- identifying periods where instruments are warming-up after a power cut
- identification of anomalies due to mains power spikes
- correcting problems with the date and time stamp
- observations made during the sites visits and services

The identification of data anomalies, the proper understanding of the effects and the application of appropriate corrections requires expertise gained over many years of operational experience. Instruments and infrastructure can fail in numerous ways that significantly and visually affect the quality of the measurements. There are rarely simple faults that can be discovered by computer algorithms or can be understood without previous experience.

The PM₁₀ and PM_{2.5} concentrations may require scaling into Gravimetric Equivalent concentration units by use of the Volatile Correction Model (VCM) http://www.volatile-correction-model.info or by corrections published by Defra https://uk-air.defra.gov.uk/networks/monitoring-methods?view=mcerts-scheme depending on the measurement technique.

Further information about air quality data management, expert data ratification and examples of bad practices are given on the Air Quality Data Management (AQDM) website http://www.aqdm.co.uk

PM₁₀ and PM_{2.5} Monitoring Adjustment

The type of PM₁₀ monitor(s) utilised within St Helens Council do not require the application of a correction factor.

Automatic Monitoring Annualisation

All automatic monitoring locations within St Helens Council recorded data capture of greater than 75% therefore it was not required to annualise any monitoring data. In addition, any sites with a data capture below 25% do not require annualisation.

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, non-automatic annual mean NO₂ concentrations corrected for distance are presented in Table B.1.

No diffusion tube NO₂ monitoring locations within St Helens Council required distance correction during 2021 with the exception of diffusion tubes 7, 10 and 31 which are triplicated with the Southworth monitor. Details of the calculation inputs can be seen in Table C.4.

Table C.2 – Annualisation Summary (concentrations presented in μg/m³)

	Site ID	Annualisation Factor Linkway	Annualisation Factor High Street	Annualisation Factor Southworth Road	Annualisation Factor Borough Road	Average Annualisation Factor	Raw Data Annual Mean	Annualised Annual Mean	Comments
Ī	2	1.1376	1.0952	1.0585	1.1356	1.1067	22.7	25.1	

Table C.3 – Local Bias Adjustment Calculation

	Local Bias Adjustment Input 1	Local Bias Adjustment Input 2
Periods used to calculate bias	1	10
Bias Factor A		0.96 (0.86 - 1.09)
Bias Factor B		4% (-9% - 16%)
Diffusion Tube Mean (μg/m³)	44.1	33.3
Mean CV (Precision)	5.4%	4.9%
Automatic Mean (µg/m³)	39.7	32.1
Data Capture	82%	95%
Adjusted Tube Mean (μg/m³)		32 (29 - 36)

Notes:

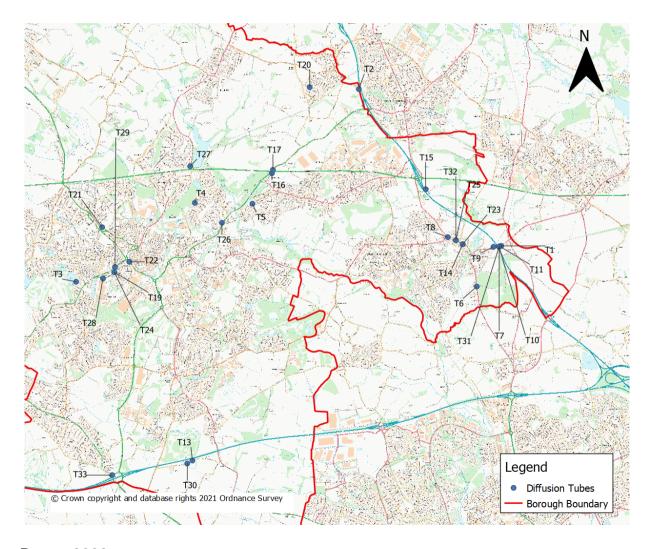
A combined local bias adjustment factor of Southworth Road and High Street has been used to bias adjust the 2021 diffusion tube results.

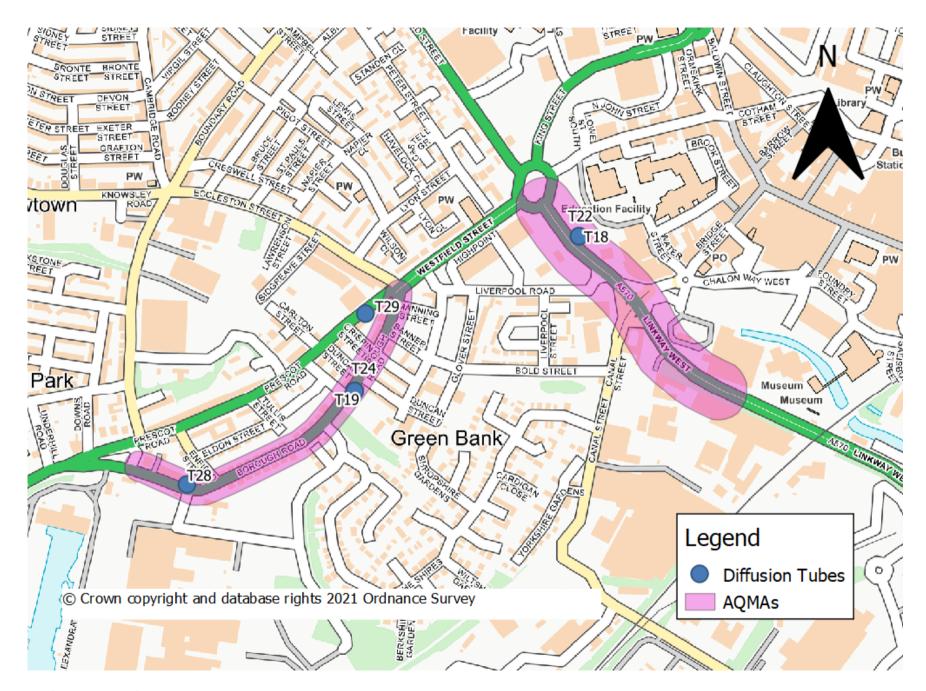
Table C.4 – NO₂ Fall off With Distance Calculations (concentrations presented in μg/m³)

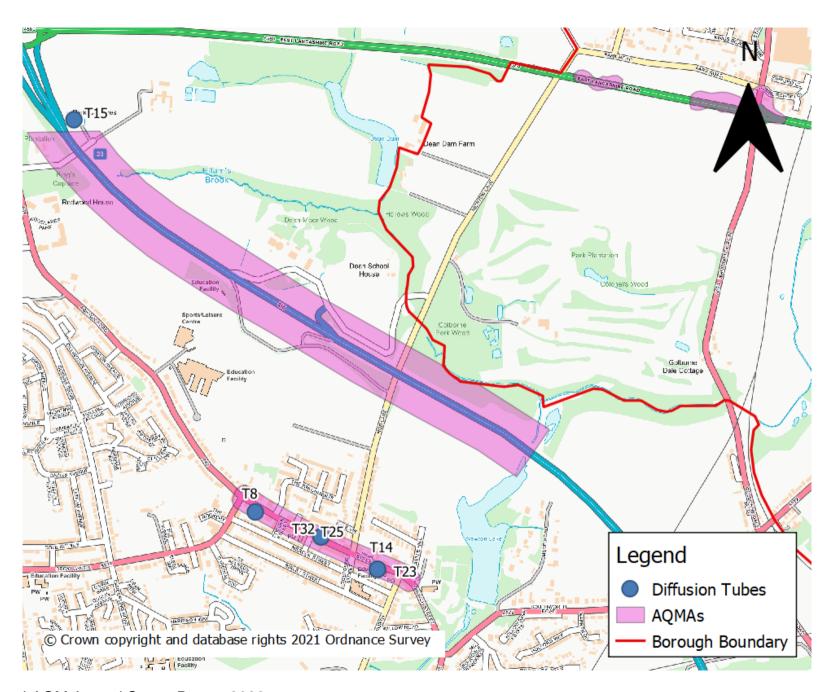
Site ID	Distance (m): Monitoring Site to Kerb	Distance (m): Receptor to Kerb	Monitored Concentration (Annualised and Bias Adjusted	Background Concentration	Concentration Predicted at Receptor	Comments
7, 10, 31	3.2	13.2	36.5	18.2	29.6	

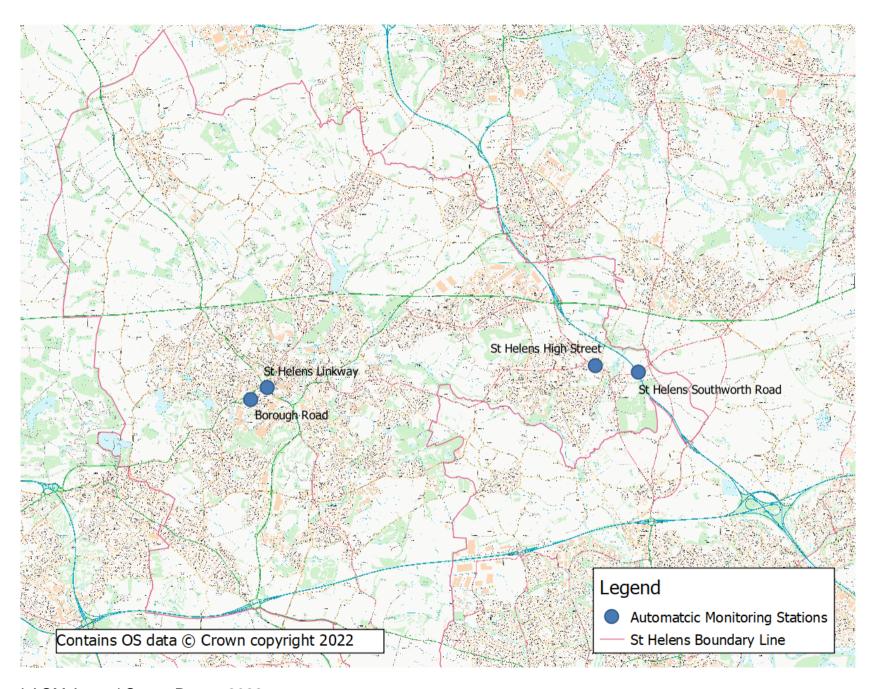
Appendix D: Map(s) of Monitoring Locations and AQMAs

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









Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England⁷

Pollutant	Air Quality Objective: Concentration	Air Quality Objective: Measured as
Nitrogen Dioxide (NO ₂)	200µg/m³ not to be exceeded more than 18 times a year	1-hour mean
Nitrogen Dioxide (NO ₂)	40μg/m³	Annual mean
Particulate Matter (PM ₁₀)	50µg/m³, not to be exceeded more than 35 times a year	24-hour mean
Particulate Matter (PM ₁₀)	40μg/m³	Annual mean
Sulphur Dioxide (SO ₂)	350μg/m³, not to be exceeded more than 24 times a year	1-hour mean
Sulphur Dioxide (SO ₂)	125µg/m³, not to be exceeded more than 3 times a year	24-hour mean
Sulphur Dioxide (SO ₂)	266μg/m³, not to be exceeded more than 35 times a year	15-minute mean

-

 $^{^{7}}$ The units are in microgrammes of pollutant per cubic metre of air ($\mu g/m^{3}$).

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 ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
PM ₁₀	Airborne particulate matter with an aerodynamic diameter of 10µm or less
PM _{2.5}	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
QA/QC	Quality Assurance and Quality Control
SO ₂	Sulphur Dioxide

Appendix F 2021 Major Planning Applications

Application Number	Site Address	Proposal	Status	Decision Date	Extended Date	26 Week Date
P/2021/0015/R ES	Moss Nook Watery Lane St Helens WA9 3EQ	Application for approval of Reserved Matters (Layout, Appearance, Landscaping and Scale) following approved permission P/2011/0058 for a residential development comprising 258 dwellings, internal access roads (accessed from the Moss Nook Spine Road, Sutton Road, Helsby Street, Little Street, Oak Street and Morris Street), garages, car parking, public open space and associated infrastructure.	Granted	07.04.2021	09.06.2021	18/05/202
P/2021/0026/S 73	Land At Former Thatto Heath Royal British Region Club Scholes Lane Thatto Heath St Helens	Variation of Condition 2 (Approved Plans) on approval P/2018/0848/FUL to alter the internal arrangement and elevational changes.	Granted	12.04.2021	13.05.2022	23/05/202

	WA10 3NU					
P/2021/0028/F UL	Ex Red Bank Community Home School Winwick Road Newton Le Willows St Helens	Proposed redevelopment of the Red Bank Educational Unit to facilitate the relocation of Penkford School includes extension to existing building, new playing field, new car park, fences, amended access from Winwick Road and associated structures.	Granted	09.04.2021	28.05.2021	20/05/202
P/2021/0065/S 73	Vulcan Village Phase 4 Wargrave Road Newton Le Willows St Helens	Variation of Conditions 2 (Approved Plans), condition 9 (noise and acoustic), 11 (Method Statement), 12 (Highways Improvements), 17 (Drainage Scheme), 18 (Drainage Management and Maintenance), 19 (Boundary Treatment) and 20 (Permitted Development Rights) to application P/2019/0217/FUL.	Granted	23.04.2021		03/06/202
P/2021/0118/S 73	Land At Sorrel Way Clock Face St Helens	Variation of Condition 2 (Approved Plans) P/2018/0908/FUL for alterations to boundary treatment, installation of concrete gravel boards.	Granted	12.05.2021		22/06/202

P/2021/0120/F UL	Land Site of Former United Glass Peasley Cross Lane St Helens	Erection of a Glass Manufacturing and Innovation facility (B2 Use Class) with associated servicing and infrastructure including car parking: HGV	Granted	07.05.2021	26.05.2021	17/06/202 1
D/0004/0477/7		parking and vehicle and pedestrian circulation.		05.05.000	22.22.22.1	05/05/000
P/2021/0177/F UL	Ashurst Primary School New Glade Hill St Helens WA11 9QJ	The demolition and provision of a new one-form entry primary school with associated outbuilding, car parking, playground spaces, soft play space, habitat area and associated fencing and planting.	Granted	25.05.2021	30.06.2021	05/07/202 1
P/2021/0196/F UL	Former Red Quarry Landfill Site Chester Lane Clock Face St Helens	Construction of 76no affordable dwellings consisting of 62no houses and 14no maisonette apartments with associated access, car parking, open space, landscaping and a pump house. (Amended layout including more visual amenity space and reduction in numbers).	Pending Consideration	01.06.2021	30.11.2021	12/07/202 1
P/2021/0232/F UL	Lea Green Station Elton Head Road St Helens WA9 5AF	Redevelopment of Lea Green Station Redevelopment. Demolition of the existing ticket office and construction of a multi storey car park and	Granted	26.05.2021	15.11.2021	06/07/202 1

		ground floor car park extension to west, new station building, and designated taxi pick up / drop off area and waiting shelter. New Retail Pods and associated landscaping, cycle and bin storage and street furniture.				
P/2021/0234/F UL	Former St Helens Post Office 39 Bridge Street St Helens	Conversion of offices to 10no apartments.	Granted	09.06.2021	25.06.2021	20/07/202
P/2021/0249/S 73	Land Adjacent to Bold Miners Neighbourhood Centre Club Fleet Lane St Helens	Variation of Condition 19 (affordable housing provision) attached to application P/2020/0487/FUL.	Granted	11.06.2021		22/07/202 1
P/2021/0263/F UL	St Helens Community Fire Station Parr Stocks Road St Helens WA9 1NU	Demolition of fire station and ancillary buildings and redevelopment of site for a residential development of 40 units comprising dwellings and apartments with associated road and landscaping.	Pending Decision	16.06.2021	16.05.2022	27/07/202 1
P/2021/0277/O UP	Land To Rear Of 1 To 79 Station Road Haydock	Outline application with some matters reserved except access, appearance and scale	Granted	21.06.2021	10.09.2021	01/08/202 1

	St Helens	for the erection of up to 4no. semi-detached dwellings with associated parking, and up to 8no. detached bungalow with associated parking.				
P/2021/0313/F UL	13 - 15 Earle Street Newton Le Willows St Helens	Conversion of vacant mixed-use site (Sui Generis, E(b) and D2) into 17no. apartments for residential use (C3) with the addition of a second storey.	Granted	29.06.2021		09/08/202 1
P/2021/0405/R ES	Linkway Distribution Park and Adjacent Land Elton Head Road St Helens WA9 5BW	Application for approval of reserved matters (layout, scale, appearance and landscaping) from permission P/2018/0060/FUL for a residential development of 294 dwellinghouses with accesses from Sherdley Road including landscaping, public open space, garages, car parking and associated infrastructure.	Pending Consideration	23.07.2021	01.06.2022	02/09/202
P/2021/0436/S 73	Land Adjacent to Former Little Lea Green Farm Elton Head Road Thatto Heath St Helens	Variation of the wording of Conditions 4, 7, 10, 11, 14 and 15 attached to permission P/2015/0309 to alter precommencement conditions to allow a phased implementation.	Granted	30.07.2021	06.08.2021	09/09/202

P/2021/0541/F UL	Former Newton Community Hospital Bradlegh Road Newton Le Willows St Helens WA12 8RB	Redevelopment of the site to provide a total of 39 dwellinghouses with the conversion and partial extension of the existing former Cottage Hospital Building to provide 9 residential dwellinghouses and a separate new building 3 storey building containing 30 dwellinghouses alongside access, open space. landscaping, and other associated structures.	Granted	02.09.2021	12.11.2021	13/10/202
P/2021/0576/S 73	Land At Baxters Lane St Helens St Helens	Variation of Condition 1 from permission P/2020/0279/S73 to amended plots 12 to 14 (dwellinghouses reorientated), 17 and 18 (replace 2 bed dwellinghouses with 3 bed dwellinghouses) and 32 to 35 (Replace terrace of 4no. 2bed dwellinghouses with a pair of semi-detached and one detached 3 bed dwellinghouses with plot 35 removed).	Granted	16.09.2021		27/10/202
P/2021/0585/R ES	Former Ibstock Brick Roughdales Ltd Chester Lane	Reserved matters application pursuant to outline planning permission ref:	Pending Decision	20.09.2021	15.11.2021	31/10/202 1

	Clock Face St Helens	P/2016/0907/S73, with approval sought of scale, layout appearance and landscaping for a residential scheme of 232 dwellings. The application was not an EIA application.			
P/2021/0593/S 73	1 Millwood Avenue Eccleston St Helens WA10 5BE	Variation of conditions:- C2 (amended plans), C6 & C7 (Tree /landscape plans on approval: P/2019/0654/FUL Condition Number(s): 2 - Approved drawing numbers 6 - Tree protection 7 - landscaping	Withdrawn	21.09.2021	01/11/202
		Conditions(s) Removal: The planning approved landscape drawing (and planting schedules) do not correlate with the planning approved site plan, hence submitting updated landscape information to ensure the information correlates. The side garden to plot			

		36 has been removed on the updated information as this forms the rear garden to the retained apartment block. As the drainage proposal has been developed, it has become apparent that an additional 2x trees have to be removed, because of drainage runs and manhole positions. Existing planning conditions to be updated to state updated drawings, which form part of this submission.				
P/2021/0594/F UL	Land At Monastery Lane St Helens	Residential development to form 94 no. dwellings, associated infrastructure and landscaping, removal of the bridge and reforming the embankment and ground levels.	Pending Consideration	24.09.2021	18.02.2022	04/11/202 1
P/2021/0631/F UL	251 To 253 New Street St Helens Merseyside	Proposed development of 14 apartments, new access road, parking, open space and landscaping.	Granted	05.10.2021	04.03.2022	15/11/202 1
P/2021/0643/F UL	Land Off Navigation Road St Helens	Proposed commercial development (Use Class B2 Industrial/B8 Storage or Distribution) of 3no. buildings, comprising 16no. units with access,	Granted	01.10.2021	26.11.2021	11/11/202 1

		associated infrastructure and landscaping.				
P/2021/0654/F P3	King George V Playing Fields Halton Street Haydock St Helens WA11 0TR	Installation a new footpath with alterations to existing footpath and reconfiguration of football and rugby pitches.	Granted	12.10.2021	05.11.2021	22/11/202 1
P/2021/0687/F UL	9-10 Fishwicks Industrial Estate Kilbuck Lane Haydock St Helens WA11 9SZ	Demolition of existing buildings and construction of new employment building (Use classes B2 (General industry)/B8 (storage and distribution) with service yard, car parking and associated site works.	Granted	25.10.2021	24.12.2021	05/12/202 1
P/2021/0716/F UL	Stork Inn 33 Main Street Billinge St Helens WN5 7HA	Change of use, conversion and extension of existing building into 8 no. apartments (Use Class C3); erection of 18 no. apartments (Use Class C3) together with associated infrastructure works including car parking, creation of a new access from Main Street, and landscaping	Granted	29.10.2021	18.03.2022	09/12/202 1
P/2021/0782/S 73	Land At Egerton Street St Helens	Variation of conditions 2 (approved plans) and 4 (landscaping) on approval	Granted	08.11.2021		19/12/202 1

		P/2020/0583/FUL to alter approved plans				
P/2021/0801/F P3	Sherdley Park Sherdley Road St Helens WA9 5DE	Widening of selected existing paths in Sherdley Park in order to make them Local Transport Note 1/20 compliant and to support	Granted	15.11.2021	17.02.2022	26/12/202 1
		an increased number of walking and cycling journeys as part of the approved St Helens Southern Gateway business case.				
P/2021/0802/F P3	Sutton Park Marshalls Cross Road St Helens	Widening of selected existing paths in Sutton Park in order to make them Local Transport Note 1/20 compliant and to support	Granted	15.11.2021	17.02.2022	26/12/202 1
		an increased number of walking and cycling journeys as part of the approved St Helens Southern Gateway business case.				
P/2021/0823/S 73	Land At Millwood Avenue Eccleston St Helens WA10 5BE	Variation of conditions 2 (amended plans - change to layout), 6 (tree protection), 7 (landscaping), 10 (highways), 12 (highway improvement), 15 (drainage strategy) and 16 (drainage scheme) on	Granted	07.12.2021	14.12.2021	17/01/202 2

		approval P/2019/0654/FUL.				
P/2021/0829/F UL	Former NHS Buildings Cowley Hill Lane St Helens WA10 2AP	Erection of 23no dwellings (C3) and retirement apartment scheme comprising of 54no independent living flats (C3) with ancillary support services, communal facilities, associated landscaping, amenity space and car parking (amended description)	Pending Consideration	30.11.2021	03.06.2022	10/01/202
P/2021/0893/F UL	Land South of Former Pilkington Group Head Office Alexandra Park Prescot Road St Helens WA10 3TT	Erection of 76 dwellings (42 houses and 34 apartments) with associated development and landscaping.	Withdrawn	30.12.2021	01.03.2022	09/02/202 2
P/2021/0917/F UL	Former Eccleston Fire Station Millfields Eccleston St Helens WA10 5NS	Demolition of existing Eccleston Fire Station and erection of proposed 64 bed care home and associated parking and landscape gardens.	Pending Decision	07.01.2022		17/02/202 2
P/2021/0987/S 73	Delta Road Solar Pv Installation Sewage Treatment Works Delta Road St Helens	Variation of conditions 2 (plan) and 11 (operational time limit) on approval P/2017/0010/FUL.	Granted	09.02.2022		22/03/202 2

	WA11 9DX					
P/2021/1039/S 73	Unit 10 Ravenhead Retail Park Milverny Way St Helens	Proposed variation of Condition 8 of planning permission P/1998/0252 to allow the subdivision of Unit 10 (Former Arcadia Store) into two separate units.	Pending Decision	01.03.2022		11/04/202 2
P/2021/1045/S 73	Land Site of Former Penlake Industrial Estate Reginald Road Bold St Helens	Variation of conditions 1 plans (retention of as built levels and french drain and repositioning of fences) and condition 2 (amended landscape plan showing position of fence and paths) on approval P/2018/0263/RES.	Pending Consideration	28.02.2022	11.03.2022	10/04/202 2
P/2021/1067/F UL	St Helens Hospital Site Marshalls Cross Road St Helens	Erection of a temporary two storey modular building to be used as additional ward space for a temporary period of 5 years	Pending Consideration	16.03.2022	31.03.2022	26/04/202 2
P/2021/1070/O UP	Land Off Elton Head Road St Helens St Helens	Outline Planning Application for up to 109 residential units with all matters reserved with the exception of access.	Withdrawn	17.03.2022		27/04/202 2

References

- Local Air Quality Management Technical Guidance LAQM.TG16. April 2021.
 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.PG16. May 2016. Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland.
- https://www.sthelens.gov.uk/business/environmental-health/environmental-protection/air-quality/
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- Policy Guidance LAQM.TG16
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