2025 Air Quality Annual Status Report (ASR)

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

Date: 12th June 2025

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Report Reference Number	RCBCASR2025
Date	12th June 2025

Local Responsibilities and Commitment

This ASR was prepared by the Environmental Protection Team of Redcar and Cleveland Borough Council with the support and agreement of the following officers and departments:

- Head of Environmental Health Teams: Erika Grunert, Health Protection Healthcare Quality Service Manager, Growth, Enterprise and Environment Directorate.
- Climate Change and Sustainability Team

This ASR has been approved by:

Andrew Carter, Assistant Director, Growth and Enterprise, Growth, Enterprise and Environment Department

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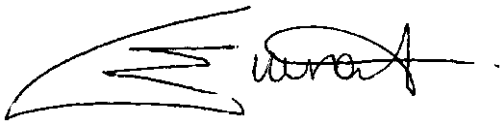
Erika Grunert, Health Protection Healthcare Quality Service Manager



Ross Asadi, Service Lead -Transport Engineering and Highways

Councillor Ursula Earl, Cabinet Member for Health, Welfare, and Housing

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

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Executive Summary: Air Quality in Our Area

Air Quality in Redcar and Cleveland

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

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

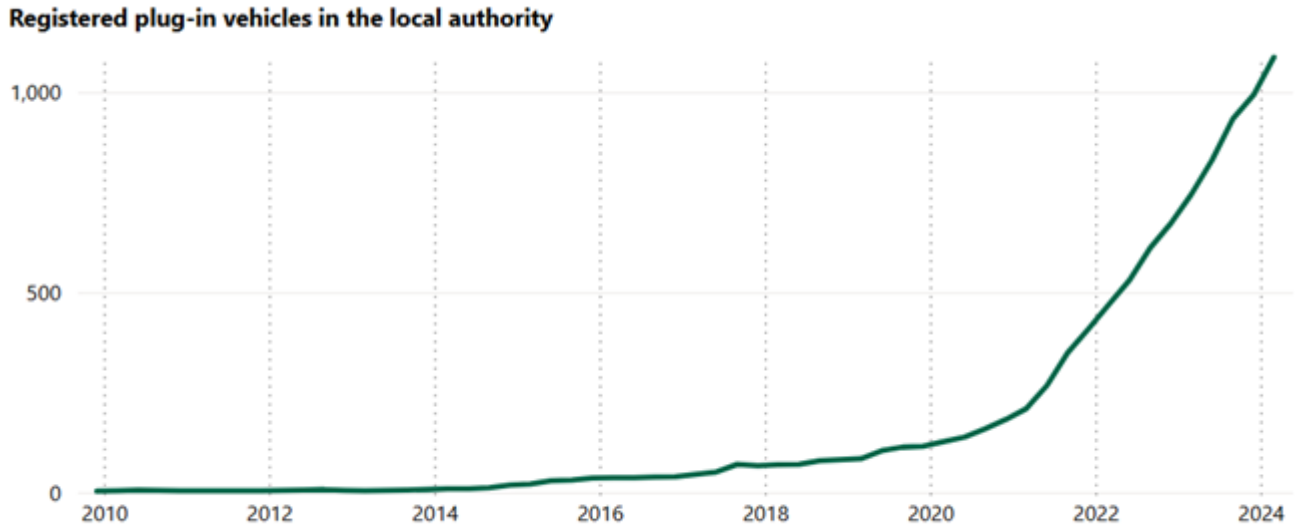
Table ES 1 provides a brief explanation of the key pollutants relevant to Local Air Quality Management and the kind of activities they might arise from.

Table ES 1 - Description of Key Pollutants

Pollutant	Description
Nitrogen Dioxide (NO_2)	Nitrogen dioxide is a gas which is generally emitted from high-temperature combustion processes such as road transport or energy generation.
Sulphur Dioxide (SO_2)	Sulphur dioxide (SO_2) is a corrosive gas which is predominantly produced from the combustion of coal or crude oil.
Particulate Matter (PM_{10} and $PM_{2.5}$)	Particulate matter is everything in the air that is not a gas. Particles can come from natural sources such as pollen, as well as human made sources such as smoke from fires, emissions from industry and dust from tyres and brakes. PM_{10} refers to particles under 10 micrometres. Fine particulate matter or $PM_{2.5}$ are particles under 2.5 micrometres.

Redcar and Cleveland Borough Council monitors three of the four key pollutants identified in the table above. SO_2 monitoring ceased during 2019 due to a long trend pattern of significantly low levels and resource was focused to $PM_{2.5}$ monitoring which was implemented during 2020.

NO_2 has shown a slight downward trend from 2023 results, a trend that is anticipated to continue in the future with the uptake of electric vehicles by the local population which has been steadily increasing since 2021.



Source: Local area data: Electric vehicles and charging points

PM_{10} has slightly increased from 2023 but is still approximately a third of the annual objective 40µg/m^3, whilst $PM_{2.5}$ has remained at the same level.

Redcar and Cleveland Borough Council maintained good air quality across the Borough for 2024.

Continued compliance with UK air quality objectives means that the declaration of an Air Quality Management Area (AQMA) is not required, and it is predicted that this status will remain the same for the foreseeable future.

Redcar and Cleveland Borough Council is proud of its industrial heritage that now progressively moves forward with advanced technologies and improved open spaces for residents and visitors to access parks, coastal spaces, and heritage museums.

Actions to Improve Air Quality

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

Redcar and Cleveland Borough Council complete an annual review of all air quality monitoring to ensure that any new sources are monitored, and the areas of greatest public exposure are assessed.

The South Tees Clean Air Strategy (STCAS), produced in collaboration with Middlesbrough Borough Council, has defined an action plan including milestones and performance measures with the aim to improve and prevent deterioration of air quality across South Tees. One of the action plan measures is for project campaigns which publicise measures that the public can take to immediately improve the quality of the air in their immediate surroundings e.g. switching off engines when stationary (anti-idling), considering alternatives to having a bonfire (composting of garden materials), carrying out annual maintenance of wood burning stoves and always burning the correct fuels on a particular stove Exempt Appliances – Clean Air Act Data Entry System

Redcar and Cleveland Borough Council officers utilise legislation in the form of Planning, Environmental Permitting and Environmental Protection to condition new sources of air pollution, regulate industrial activities and investigate complaints of smoke from commercial and domestic premises across the borough.

Conclusions and Priorities

Redcar and Cleveland's air quality generally follows the trend seen over the previous reporting years. The pollutants monitored (NO_2, NO_x, O_3, PM_{10} and $PM_{2.5}$) have all demonstrated compliance with the UK Air Quality Objectives. Current and historic data for Redcar and Cleveland Borough Council can be found via the Air Quality England website.

Redcar and Cleveland Borough Council have never declared any AQMA's and this trend is envisaged to not change in the future.

Annual mean figures for the pollutants monitored during 2024 (calculated using Defra's new automatic data processing tool) have shown similar patterns to previous years. Since the introduction of the dedicated continuous analyser for $PM_{2.5}$ in 2020, levels have remained at 7µg/m^3. PM_{10} annual mean has fluctuated between 14µg/m^3 and 10µg/m^3 since 2022 and is currently 12.4 µg/m^3. Nitrogen dioxide values from the continuous analyser have seen a slight reduction from 9µg/m^3 in 2023 to 8.6µg/m^3 in 2024. The diffusion tube network in 2024 has 1 location (R54 Ormesby Bank 1) with an annual average above 20µg/m^3, whereas in 2023 there were 2 locations above 20µg/m^3 (R54 Ormesby Bank 1 and R27 West Lane). Both these sites are showing a downward trend in pollution levels (see Table A.4), this can

possibly be attributed to more electric vehicles using the route. The remaining sites are significantly below the 40µg/m^3 air quality objective (see Table A.4).

Redcar and Cleveland continue to review the diffusion tube network on an annual basis (additional details are outlined in the main body of this report). The Local Authority remains committed to monitoring $PM_{2.5}$ which is identified as the main pollutant of concern for adverse health implications.

The first STCAS has now been in place for a year and the joint objectives in collaboration with Middlesbrough Borough Council have been reviewed in-line with the ASR 2025 submission. The South Tees Clean Air Strategy can be viewed on the Redcar and Cleveland Borough Council website. The Local Authority remains committed to implementing the measures identified in the STCAS and to focus on project campaigns, keeping up the momentum of air quality messages in the public domain.

Moving forwards, the top 3 priorities for air quality in Redcar and Cleveland are firstly to implement the measures identified in the STCAS in conjunction with other strategies and policies implemented by the Council (e.g. Transport for the Future, The Local Implementation Plan for Transport in Redcar and Cleveland Local Implementation Plan for Transport.pdf, Climate Change Action Plan 2021-2025 Climate Change Action Plan 2021-2025.pdf and Health and Wellbeing Strategy 2024-2030 Health and Wellbeing Strategy.pdf).

Secondly to increase awareness of air quality using project campaigns and thirdly to increase awareness of air quality via annual Clean Air Day.

How to get Involved

Redcar and Cleveland support the annual 'Clean Air Day' campaign operated by Global Action Plan. The theme for 2024 had a focus on cars and vans being the biggest source of toxic chemicals in our air.

Rather than focus on one day of the year for air quality, Redcar and Cleveland ran a winter campaign on anti-idling using posters outside of schools to encourage people to '*Care about their air*', switch off engines rather than idle and protect public health. This campaign is being extended into 2025.

In the Autumn of 2024, Redcar and Cleveland carried out a bonfire campaign using posters installed across all libraries and notice boards in the Borough to encourage people to think about whether they really need to have a bonfire and what alternatives are available to them.

Redcar and Cleveland also used posters in libraries to publicise the Defra 'Burn Better' guide reminding stove users of the requirements to 'Check it, Sweep it, Feed it' and provided additional links to information on the Council's website.

The Local Authority remains committed to the climate change emergency. Information for residents, businesses and visitors to help us with our mission and updates on the council's progress with carbon reduction can be found on the Greener Future website.

Previously residents across the Tees Valley, which includes Redcar and Cleveland, were able to access the Let's Go Tees Valley website which offered information on transport options across the region. This has now been replaced by a dedicated section within the Tees Valley Combined Authority (TVCA) website, outlining specific information on public transport, electric transport and cycling and walking routes.

The Enjoy Redcar / Cleveland website provides detailed information and maps for walking / cycling routes across the Borough. The website also provides information on upcoming events in the area including wellness walks and other physical exercise opportunities.

Redcar and Cleveland Borough Council in partnership with British Cycling launched the East Cleveland Classic which took place on Sunday 14th April 2024.

Also, on 4th September 2024 Redcar and Cleveland were host to the final location for the Lloyd's Bank Tour of Britain 2024.

Residents and visitors can access the Zap Map website to find the locations of all electric vehicle charging (EVC) locations across Redcar and Cleveland, helping them to plan their journeys.

Residents and visitors can do their bit for air quality and the climate by carrying out effective recycling to reduce waste being sent to landfills and incinerators, prevent pollution to the environment and conserve natural resources. Around 40% of recycling sent to the recycling centre in South Bank is contaminated and the Council appeals to residents, visitors and staff to put their waste in the right place to ensure that plastic bags,

food waste, clothes and textiles, nappies, takeaway boxes, polystyrene as well as electrical items and batteries don't end up in their recycling bin. To see what can be recycled at home and at Dunsdale Recycling Centre please visit -

Recycling | Redcar and Cleveland

Dunsdale Recycling Centre accepts the electricals somebody may no longer use to help someone else.

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Tables

1 Local Air Quality Management

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

The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where an exceedance is considered likely the local authority must declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in order to achieve and maintain the objectives and the dates by which each measure will be carried out. This Annual Status Report (ASR) is an annual requirement showing the strategies employed by Redcar and Cleveland Borough Council to improve air quality and any progress that has been made.

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

2 Actions to Improve Air Quality

2.1 Air Quality Management Areas

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

Redcar and Cleveland Borough Council currently does not have any declared AQMAs. A local Clean Air Strategy is in place to prevent and reduce polluting activities. The Local Air Quality Strategy is available at:

https://www.redcar-cleveland.gov.uk/environment/environmental-protection/air-quality

2.2 Progress and Impact of Measures to address Air Quality in Redcar and Cleveland

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

1. The Council has considered the comments made during previous appraisals. This is commended and the Council is encouraged to continue this approach for ASRs.
2. The South Tees Clean Air Strategy has now been published in conjunction with Middlesborough Council. This is welcomed.
3. The Council have included the results from various $PM_{2.5}$ analysers from different Council's in Table A.8. The Council should add the relevant information to Table A.1 for these respective monitoring sites they choose to present the data in future ASRs.
4. Good Trend graphs and analysis have been provided for selected monitoring data, which is commended. The Council are highly encouraged to provide trend graphs for all monitoring locations in future ASRs.

5. The Council have provided clear evidence of local engagement, which is welcomed.
6. There is a minor inconsistency between the data capture presented in Table A.4 and Table B.1. Table B.1 indicates that all monitoring locations were operational for the full calendar year (2023). Hence, in Table A.4, the Valid Data Capture for Monitoring period should be the same as the Valid Data Capture for 2023 at all monitoring locations. The Council is highly encouraged to amend this error in future reporting years.
7. The use of the Public Health Outcomes Framework to account for the health effects of $PM_{2.5}$ is commended. The Council have also presented extensive measure to address $PM_{2.5}$ emissions, which is indicative of good practice.
8. The Council have provided excellent mapping of all monitoring locations within the district and included AQMA boundaries, which is commended.

On the basis of the evidence provided by the local authority the conclusions reached in the report are accepted for all sources and pollutants.

Redcar and Cleveland Borough Council will continue to report on the points noted above and have taken action to rectify the observations noted in point 3 and 6.

Redcar and Cleveland has taken forward a number of direct measures during the current reporting year of 2024 in pursuit of improving local air quality. Details of all measures completed, in progress or planned are set out in Table 2.1. Twenty-nine measures are included within Table 2.1, with the type of measure and the progress Redcar and Cleveland Borough Council have made during the reporting year of 2024 presented. Where there have been, or continue to be, barriers restricting the implementation of the measure, these are also presented within Table 2.1.

Measures that don't fit within Table 2.2 are detailed below the table.

More detail on these measures can be found in their respective Action Plans – STCAS, additional air quality measures are considered as part of the Strategic Local Transport Plan for the Tees Valley STP-Main-Report-Design-Jan20-4.pdf , Transport for the Future, The Local Implementation Plan for Transport in Redcar and Cleveland Local Implementation Plan for Transport.pdf ,Transport for the Future, The Local Implementation Plan for transport in Redcar and Cleveland Scheme Delivery Local Implementation Plan for Transport- Scheme Delivery.pdf, Climate Change Action Plan 2021-2025 Climate

Change Action Plan 2021-2025.pdf and Health and Wellbeing Strategy 2024-2030 Health and Wellbeing Strategy.pdf.

Key completed measures are:

- Implementation of the STCAS and update provided as part of the 2025 ASR return (see Table 2.2).
- Completion of an autumn media campaign regarding bonfires and alternative measures to dispose of garden waste and other waste materials.
- Completion of a winter anti idling campaign targeting areas around schools.
- Promotion of the Defra 'Burn Better' guide reminding stove users of the requirements to 'Check it, Sweep it, Feed it'.

Redcar and Cleveland Borough Council expect the following measures to be completed over the course of the next reporting year:

- Continued implementation/delivery of the STCAS in conjunction with other policies and strategies adopted by the Council and to report on the adopted measures in the 2026 ASR.
- Submission of the next ASR by the deadline 30th June 2026.

Redcar and Cleveland's priorities for the coming year are:

- To implement the measures in the South Tees Clean Air Strategy in conjunction with other policies and strategies.
- To increase awareness of air quality using project/media campaigns.
- To increase awareness of air quality via annual Clean Air Day.

Redcar and Cleveland Borough Council worked to implement these measures in partnership with the following stakeholders during 2024:

- Neighbouring local authorities – Darlington, Hartlepool, Stockton and Middlesbrough.
- Climate Change, Planning and Transport Teams within Redcar and Cleveland Borough Council and across the wider Tees Valley.
- Tees Valley Combined Authority (TVCA).
- Sustrans (Active travel charity).
- Network Rail.
- Stakeholders of the South Tees Clean Air Strategy (STCAS).

The principal challenges and barriers to implementation that the Local Authority anticipates are the financial challenges for public services and staffing pressures which restrain the authority from carrying out non-statutory activities e.g. valuable project work such as focus on Clean Air Day and air quality awareness in schools.

Progress on the following measures has been slower than expected due to limited funding and staffing resource:

- CE01 Introducing ‘clean air awareness’ around schools on a targeted basis and introducing materials on air quality to link to the national curriculum. The intention is to test whether the materials and overall approach are acceptable and engaging for pupils, schools and communities with a view to wider scale roll out in future years (part of the Creating Active Schools Framework). Redcar and Cleveland Borough Council have introduced clean air awareness around schools using posters to raise awareness of the health impacts of exhaust emissions from idling engines. We have not so far introduced materials on air quality to link to the national curriculum.

Table 2.1 – Progress on Measures to Improve Air Quality

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
1	Implement the measures in the South Tees Clean Air Strategy in conjunction with other policies and strategies	Policy Guidance and Development Control	Other	2024	Ongoing	Environmental Protection, Transport, Highways, Climate Change and Planning Teams at Redcar and Cleveland Borough Council	N/A	N/A	N/A	Implemented	Continued achievement of NO_2, PM_{10}, $PM_{2.5}$ objectives and downward or steady trend in pollutant levels monitored	Measured pollutant levels at Redcar Dormanstown (RED3)	Annual Status Report 2024 details updates for South Tees Clean Air Strategy measures	Limited capacity within the team is a barrier to implementation of all the measures.
2	To increase awareness of air quality using project campaigns	Public Information	Via leaflets and other mechanisms	2024	Ongoing	Environmental Protection Team, Climate Change Team	N/A	N/A	N/A	Implemented	Continued achievement of NO_2, PM_{10}, $PM_{2.5}$ objectives and downward or steady trend in pollutant levels monitored	Measured pollutant levels at Redcar Dormanstown (RED3)	Winter campaign on anti-idling (2024) Autumn campaign on bonfires (2024) Promoted the Defra 'Burn Better' guide (2024) Carbon footprint project (February 2024) Carbon neutral campaign (Autumn 2024) Home Upgrade Grant (HUG) promotion (2024)	None
3	To increase awareness of air quality via annual Clean Air Day	Public Information	Other	2024	Ongoing	Environmental Protection Team	N/A	N/A	N/A	Implemented	Reduced emissions from vehicles idling. Continued achievement of NO_2, PM_{10}, $PM_{2.5}$ objectives and steady trend of reduction of pollutant levels monitored.	N/A	Promotion of annual Clean Air Day was not carried out for 2024 however we carried out an Anti-idling winter campaign which tied in with the 2024 Clean Air Day theme of cars and vans being the biggest source of toxic chemicals in our air.	Lack of staffing resource to fulfil a campaign on CAD.
4	School Air Quality Zones Contract – Redcar & Eston School Sports Partnership Community Interest Company (CIC), included installation of air quality monitoring devices outside schools and is now implemented and incorporated into the Creating Active Schools Framework. (South Tees Clean Air Strategy DI01)	Public Information	Via other mechanisms	Ongoing	Complete	Public Health South Tees, Middlesbrough Environment City (MEC), Redcar & Eston School Sport Partnership CIC, Cleveland School Sport Partnership CIC	Sport England and Local Authority	Complete	Not quantified, existing staff	Completed	Downward or steady trend in pollutant levels monitored	No KPI	Between February 2023 and October 2023 air quality monitoring and behaviours linked to school travel were explored and an evaluation report was produced. In August 2023 it was agreed the package would be incorporated into the Creating Active Schools (CAS) framework being rolled out locally across Teesside – specifically the air quality monitor and materials will be used when a school prioritises active travel as part of their approach to the CAS framework.	Although this project is complete, schools can still use the monitor and lesson plans which are linked to the CAS framework. No additional schools have used the monitor in 2024.

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
5	Submit Local Air Quality Management annual status report to Defra (South Tees Clean Air Strategy DI03)	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	Ongoing	Ongoing	Redcar and Cleveland Borough Council Environmental Protection Team	Local Authority	Not Funded	Not quantified, existing staff	Completed	Downward or steady trend in pollutant levels monitored	No KPI	Government Air Quality objectives complied with.	None
6	Provide statutory update on progress with the South Tees Clean Air Strategy to Defra. (South Tees Clean Air Strategy DI04)	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	Ongoing	Ongoing	Redcar and Cleveland Borough Council	Local Authority	Not Funded	Not quantified existing staff	Completed	The STCAS details measures to improve air quality across South Tees, including Redcar and Cleveland.	No KPI	As reported in ASR 2025, Section 2.2	Resources to fund staff to carry out projects such as air quality integration with schools and the national curriculum.
7	Air Pollution and Carbon Emissions Net Zero Project (APACE Net Zero) (South Tees Clean Air Strategy DI06)	Public Information	Via other mechanisms	2023	Not now applicable to Redcar and Cleveland Borough Council as APACE are working with Middlesbrough Borough Council so that they can validate their results to Middlesbrough's Defra affiliated air monitoring station.	TVCA	BP and the APACE Consortium	Not implemented in Redcar and Cleveland Borough Council	Not known	No further requirement within Redcar and Cleveland Borough Council	N/A for Redcar and Cleveland Borough Council	No KPI	Redcar and Cleveland Borough Council carry out local air quality monitoring funded by the local authority whereas Middlesbrough Borough Council has a Defra funded/affiliated Automatic Urban Rural Network monitoring site.	APACE - working with Middlesbrough Council to co-locate a solar powered air quality sensor that provides air quality data for a number of pollutants. Co-located at AURN site - Breckon Hill - annual results will be available June 2025
8	Update on Bikeability and Dr Bike statistics (South Tees Clean Air Strategy DI08)	Promoting Travel Alternatives	Promotion of cycling	Ongoing	Ongoing	Sustrans, Redcar and Eston School Sport Partnership	DfT via TVCA Transport	Ongoing (current contract until at least June 2025)	£30-40k per year (estimate), The Sustrans team delivers a range of other services as well as Dr Bike	Implemented/ongoing	Downward or steady trend in pollutant levels monitored.	Number of Dr Bike Sessions. Number of Bikes checked. Bikeability Level 1. Bikeability Level 1&2. Balance Bike training L2R.	107 Dr Bike events. 663 bikes checked. Level 1 – 695. Level 1&2 - 1,216. Balance – 376. Learn2Ride – 85.	A good relationship has been established with schools who are onboard with the Active Travel Programs. Projected figures for Bikeability for 2025/2026 are: Level 1 – 592 Level 1 & 2 – 1323 Level 3 – 25 Learn2Ride - 165
9	Partnership with Tees Valley Combined Authority (TVCA) to offer free travel for school aged children during school holidays when accompanied by a fare-paying adult or adult with a valid travel pass (TVCA Kids go free by bus this summer). (South Tees Clean Air Strategy AF01)	Promoting Travel Alternatives	Other	July 2022	Ongoing – agreement to continue this offer across school Summer Holidays until September 2026.	Arriva, Stagecoach, Go North East Promoted by TVCA and the 5 Tees Valley Local Authorities	N/A – this is commercially provided by the operators.	N/A – this is commercially provided by the operators.	Unknown – this is commercially provided by the operators.	Active/ongoing	Downward or steady trend in pollutant levels monitored.	Not actively tracked/ monitored given this is a commercial offer.	Agreement now received to commit to this offer until September 2026. Stagecoach is aiming to have 64 electric buses in service 2025.	The offer enables up to 3 children, aged 11 or under, to travel for free with a fare paying or concessionary adult.

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
	£1 fare cap on single journey bus trips for young people aged 21 and under plus £3 day ticket cap	Promoting Travel Alternatives	Other	June 2024	June 2025	All Tees Valley operators (Arriva, Stagecoach, Go North East, Hodgsons Coaches, Weardale Motor Services and Paul's Travel). Implemented by TVCA, promoted by the 5 Tees Valley Local Authorities.	TVCA's Bus Service Improvement Plan (BSIP) allocation.	2025/26 allocation recently received.	Budgeted approximately £2.5m for June 2024 – June 2025. This scheme is impacted by the national fare cap, which increased to £3 in December 2024 (see below row). TVCA are therefore currently working through the detail to finalise the expected reimbursement for this scheme.	Active/ongoing	Downward or steady trend in pollutant levels monitored	No specific set KPI's as this was a completely new offer. TVCA hope that this will increase patronage within the U22 age range and monitor the usage accordingly.	June 2024 – December 2024 Total Patronage for 21s and under was 1,693,468 Agreements made to keep this scheme in place until June 2025. Currently looking to extend the scheme further (likely to Dec 2025), subject to the cost impact of the national fare cap.	The main risk to this scheme is the uncertainty around the national fare cap, and therefore the long-term affordability for TVCA.
	Get around by bus for £2 (2023/2024 Scheme)	Promoting Travel Alternatives	Other	January 2023	December 2024	All Tees Valley Operators - promoted by TVCA and the 5 Tees Valley Local Authorities.	Government funded national cap – not a local scheme.	The £2 cap has now come to an end, and the £3 cap was introduced as of Jan 2025. The Government have agreed to keep the £3 cap in place until December 2025.	Unknown - this is provided by the Government on a national level.	£2 cap has now ended, £3 remains active/ ongoing for 2025.	Downward or steady trend in pollutant levels monitored	Not a specific TVCA scheme, so therefore do not track KPI measures, however, do track patronage to review and report the impact of the £2/£3 cap.	January 2024 – December 2024 Total Patronage for £2 fare cap / 21s and under was 2,849,423 £2 cap has now ended, £3 remains active/ ongoing for 2025.	Currently only agreed until December 2025.
10	Increase the level of zero emission vehicles in the Council's fleet to 20% by 2024 (South Tees Clean Air Strategy AF03)	Vehicle Fleet Efficiency	Other	Ongoing	2024	Redcar and Cleveland Borough Council	Redcar and Cleveland Borough Council	Completed	-	Implemented	Downward or steady trend in pollutant levels monitored	No KPI	Completed/Achieved	Hydrogenated Vegetable Oil (HVO) used in 6 sweepers which has 90% less emissions than diesel. In addition, 9 refuse lorries have solar PV mats on their roofs which extend the range of the vehicles reducing emissions and cost of ownership.
11	Redcar and Cleveland to become carbon neutral by 2030 (South Tees Clean Air Strategy AF04)	Policy Guidance & Development Control	Other policy	August 2024	Ongoing	Redcar and Cleveland Borough Council TVCA	Government funding	-	-	Ongoing	Reducing carbon emissions	10% reduction 2024/5	Reducing emissions year on year	None
12	Redcar and Cleveland to become 100% clean energy supply by 2050. (South Tees Clean Air Strategy AF05)	Policy Guidance & Development Control	Other policy	Ongoing	2050	Redcar and Cleveland Borough Council Climate Change, Growth, Enterprise and Environment, Energy supplier	Not funded	N/A	-	Ongoing	Reducing carbon emissions Downward or steady trend in pollutant levels monitored	No KPI	Ongoing	Council purchase electricity via a green tariff (nuclear) and generate electricity via renewables. Gas usage is being gradually phased out.

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
13	TVCA and Circular Fuels Ltd. New waste facility at South Bank operational from 2025, which will explore carbon capture technology. (South Tees Clean Air Strategy AF06)	Policy Guidance and Development Control	Regional Groups Co-ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	Ongoing	Initially anticipated for 2025 however works currently on-hold	TVCA, Circular Fuels Ltd.	Inward investment	On-Hold	-	Operational development not achieved for 2025.	N/A	No KPI	On-hold	TVCA provided advice and support, however project on-hold.
14	Explore transport infrastructure improvements that work to reduce pollution. (South Tees Clean Air Strategy AF07)	Transport Planning and Infrastructure	Other	Ongoing	2030	Redcar and Cleveland Borough Council Transport, Growth, Enterprise and Environment					Downward or steady trend in pollutant levels monitored	No KPI		
15	Redcar & Cleveland Borough Council were part of two bids into Innovate UK for the Tees Valley Hydrogen Transport Hub. The bids were not successful but an additional vehicle from a different successful bid is to be trialled within the borough. (South Tees Clean Air Strategy AF08)	Vehicle Fleet Efficiency	Fleet efficiency and recognition schemes	Ongoing	Arriving October 2025 for completion September 2026	Redcar and Cleveland Borough Council Climate Change, Growth, Enterprise and Environment TVCA, Supplier	TVCA	Funded	£75,000	Ongoing	Downward or steady trend in pollutant levels monitored.	No KPI	Awaiting vehicle delivery	Awaiting vehicle delivery in 2025
16	Trial large hydrogen vehicles as part of the Tees Valley Hydrogen Transport Hub (South Tees Clean Air Strategy AF09)	Vehicle Fleet Efficiency	Fleet efficiency and recognition schemes	Ongoing	Arriving October 2025 for completion September 2026	Redcar and Cleveland Borough Council Climate Change, Growth, Enterprise and Environment TVCA, Supplier	TVCA	Funded	£75,000	Ongoing	Downward or steady trend in pollutant levels monitored.	No KPI	Awaiting vehicle delivery	Awaiting vehicle delivery in 2025
17	Employ sustainable transport initiatives through City Region Sustainable Transport Settlement (CRSTS) and Local Implementation Plan for Transport in conjunction with TVCA. (South Tees Clean Air Strategy AF10)	Policy Guidance and Development Control	Regional Groups Co-ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	2020	Ongoing	Redcar and Cleveland Borough Council Growth Enterprise and Environment, in partnership with Sustrans using DfT funding. Redcar and Cleveland Borough Council in partnership with Sustrans TVCA Bus operators Others	Government Other	Funded	Programme	Completion of the upgrade of the Black Path and the Lines off road cycle route between Flatts Lane and South Bank (Greater Eston). Funding for secure cycle parking within buildings in key locations to encourage cycling. Development work for upgraded (and expanded) cycle routes in Redcar, Marske and Saltburn (Coastal).	Downward or steady trend in pollutant levels monitored.	Programme of interventions under CRSTS1, LUF, ATE & BSIP grants Schemes include 2 improvements to NCN1 cycle route, other cycle routes, sustainable access to Teesworks, including Park and Ride, better bus infrastructure, improvements to railway stations. Funding for bus services.	Including: NCN1 improvements at design & approvals with scheduled delivery by 03/26. Improvement South Bank to Flatts Lane cycle route delivered 2024/25 Supported bus services in place. Bus shelter contract in place plus additional bus shelters delivered annually. Review of Active Travel Hub delivery ongoing	None

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
18	Promote the implementation of an ultra-low emission vehicle infrastructure across the South Tees. (South Tees Clean Air Strategy AF11)	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	2022	Ongoing	Redcar and Cleveland Borough Council Transport, Growth, Enterprise and Environment, TVCA, Office for Zero Emission Vehicles (OZEV) Suppliers	OZEV, Supplier	Grant funding awarded	£72,000 being provided to the supplier for On-Street Residential Charging	Slightly behind target due to procurement issues.	Downward or steady trend in pollutant levels monitored.	20 additional chargers (2024/25) 2025/26 40 additional chargers 2026/28 70 additional chargers	60 sockets (30 chargers) with another 60 coming online in 2025/26. TVCA running separate LEVI project	None
19	Explore opportunities with organisations to encourage the use of cleaner commercial vehicles. (South Tees Clean Air Strategy AF12)	Promoting Low Emission Transport	Company Vehicle Procurement - Prioritising uptake of low emission vehicles	Ongoing (Completed 2024).	N/A	TVCA Redcar and Cleveland Borough Council Growth Enterprise and Environment	Government Levelling Up Programme	Funded	£173,318	Using funding from Government under the Levelling Up Programme the Council purchased three vehicles for three charities working across the Borough. Two of these vehicles are electric vans helping both the charities involved to become low carbon. The charities provide a) Bikeability cycle training to young people and families and b) physical education, both within an education setting.	Downward or steady trend in pollutant levels monitored.	No KPI	Complete	None
20	Introducing 'clean air awareness' around schools on a targeted basis and introducing materials on air quality to link to the national curriculum. The intention is to test whether the materials and overall approach are acceptable and engaging for pupils, schools and communities with a view to wider scale roll out in future years. Part of the Creating Active Schools Framework (South Tees Clean Air Strategy CE01)	Public Information	Other	Ongoing	Ongoing	Redcar and Cleveland Borough Council, Public Health South Tees	None	N/A	Not quantified existing staff	Redcar and Cleveland Borough Council have introduced clean air awareness around schools using posters to raise awareness of the health impacts of exhaust emissions from idling engines. Materials on air quality to link to the national curriculum have not yet been introduced, however resources are available from Global Action Plan.	Downward or steady trend in pollutant levels monitored.	No KPI	Redcar and Cleveland ran a winter campaign on anti-idling during 2024. This campaign is to be extended for 2025/26.	Lack of resources to fund staff to develop and deliver air quality literature linked with the national curriculum.
21	Public engagement events across the South Tees area to raise awareness of air quality related issues including in support of annual Clean Air Day / Car Free Day. (South Tees Clean Air Strategy CE03)	Public Information	Other	Ongoing	Ongoing	Redcar and Cleveland Borough Council Environmental Protection Team	None	N/A	Not quantified existing staff	Rather than focus on one day of the year for air quality, Redcar and Cleveland ran a winter campaign on anti-idling using posters outside of schools to encourage people to care about their air, switch off engines rather than idle and protect public health.	Downward or steady trend in pollutant levels monitored.	No KPI	Redcar and Cleveland ran a winter campaign on anti-idling during 2024. This campaign is to be extended for 2025/26.	Lack of resources to fund staff to develop and deliver project work linked to specific days such as Clean Air Day / Car Free Day.

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
22	Identify hotspot areas for targeted action and make this data central and accessible to other stakeholders within the private and public sector. – Air quality data is available to all stakeholders using the following link https://uk-air.defra.gov.uk/ The Annual Status Report is available using the following link Redcar and Cleveland Borough Council Air Quality | Redcar and Cleveland (South Tees Clean Air Strategy CE04)	Public Information	Via the Internet	Ongoing	Ongoing	Redcar and Cleveland Borough Council Environmental Protection Team	None	N/A	Not quantified existing staff	Redcar and Cleveland Borough Council have so far not identified any hotspot area for air pollution that are of concern for exceeding Government objective levels for air quality.	Downward or steady trend in pollutant levels monitored.	No KPI	As reported in this ASR, we continue to monitor Ormesby Bank using diffusion tubes as this is an area with higher levels of NO_2 compared with the rest of the borough but remains within objective levels for air quality.	None
23	Promoting positive messages to raise awareness of outdoor air pollution (South Tees Clean Air Strategy CE05)	Public Information	Via other mechanisms	Ongoing	Ongoing	Redcar and Cleveland Borough Council Environmental Protection Team	None	N/A	Not quantified existing staff	In 2024 the following awareness campaigns were carried out regarding Bonfires, Anti-Idling and Wood Burning Stoves.	Downward or steady trend in pollutant levels monitored.	No KPI	In the Autumn of 2024, a bonfire campaign utilised posters installed across all libraries and some notice boards to encourage people to think about whether they really needed to have a bonfire and what alternatives were available to them. In the Autumn of 2024, used posters in libraries to publicise the Defra 'Burn Better' guide and provided additional links to information on Redcar and Cleveland Borough Council's website. Winter of 2024 ran a campaign on anti-idling.	None
24	Applicable planning applications to include an air quality assessment in line with the National Planning Policy Framework (NPPF). (South Tees Clean Air Strategy ENF01)	Policy Guidance and Development Control	Other policy	Ongoing	Ongoing	Redcar and Cleveland Borough Council Environmental Protection and Development Control Teams	None	N/A	Not quantified existing staff	Implemented	Downward or steady trend in pollutant levels monitored.	No KPI	Implemented where required.	None
25	Engage with businesses that hold Environmental Permits to ensure they comply with emission limits and where necessary undertake enforcement action for non-compliance. (South Tees Clean Air Strategy ENF05)	Environmental Permits	Other	Ongoing	Ongoing	Redcar and Cleveland Borough Council Environmental Protection Team	None	N/A	Not quantified existing staff	Implemented	Downward or steady trend in pollutant levels monitored.	No KPI	30 businesses were inspected in 2023/2024. 12 businesses were inspected in 2024/2025. All complied with the terms of their permits.	None

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
26	Provide advice and data to the public with concerns about their local air quality. (South Tees Clean Air Strategy ENF07)	Public Information	Via other mechanisms	Ongoing	Ongoing	Redcar and Cleveland Borough Council Environmental Protection Team	None	N/A	Not quantified existing staff	Implemented	Downward or steady trend in pollutant levels monitored.	No KPI	59 people were issued with advice regarding concerns for local air quality arising from wood burning stoves or from bonfires.	None
27	Communications campaign to increase awareness of sources of indoor air pollution and maximising Making Every Contact Count (MECC). (South Tees Clean Air Strategy IAQ01)	Public Information	Via other mechanisms	Ongoing	N/A	Public Health South Tees, Smoke Free Alliance	N/A	N/A	Not quantified existing staff	Implemented	Less public exposure to indoor air pollution.	No KPI	Implemented - Making Every Contact Count | Redcar and Cleveland	None
28	Encourage people to give up smoking (Smoking Cessation Service, South Tees Smoke Free Action Alliance). (South Tees Clean Air Strategy IAQ02)	Public Information	Via other mechanisms	Ongoing	Ongoing	Public Health South Tees, Smoke Free Alliance	Public Health Grant Additional grant	Ongoing Ends 2027/28	£10K annual budget for marketing and communications.	Ongoing	Less public exposure to indoor/outdoor air pollution.	No KPI	In 2024 Smoke Free South Tees received 1891 referrals and supported 1429 residents towards quitting.	None
29	Working with registered providers to communicate with residents and to raise awareness of indoor air pollution. (South Tees Clean Air Strategy IAQ03)	Public Information	Via other mechanisms	Ongoing	Ongoing	Redcar and Cleveland Borough Council Housing Teams Beyond Housing Thirteen Smoke Free Alliance	-	-	-	Registered Provider	Less public exposure to indoor air pollution.	No KPI	Beyond Housing (largest registered provider in Redcar and Cleveland) actions: Created a damp and mould advice leaflet issued to customers providing guidance on how to ventilate properties and control condensation levels in customers' homes such as cooking, drying clothes and other measures controls. Dedicated trained damp and mould advisors issued hygrometers and advice leaflets if condensation identified during video calls with customers. They also provided guidance over customer reported damp and mould cases. Installed Aico Environmental sensors in some properties to record humidity, temperature and CO_2 in customers' homes, the information was then shared with the customer.	Installing Greenwood CV2 humidity stat fans to kitchen, bathrooms on the capital works programmes which activate in high humidity levels. Also upgrading or installing these fans in properties identified as having condensation issues. The South Tees Smokefree Alliance remains committed to educating partners and stakeholders about the risks of second-hand smoke while providing advice on maintaining smoke-free indoor spaces. Currently, the alliance is looking to collaborate with social housing providers, who are Alliance members, to include essential stop smoking guidance and information in new tenant packs. Lack of resources to fund staff to develop and deliver project work in collaboration with registered providers

Redcar and Cleveland Borough Council has taken forward a number of direct measures during the current reporting year of 2024 in pursuit of improving local air quality.

- Summer 2024 carried out public consultation regarding an active travel route connecting Guisborough to Nunthorpe. The project will encourage people to travel using more active modes of transport such as cycling, wheeling, scooting and walking. The consultation received 129 comments direct to the Redcar & Cleveland Borough Council element of engagement, with a further 81 comments received from the TVCA engagement specific to the Guisborough to Nunthorpe active travel route. Further to the feedback received changes were made to the route. The full consultation can be viewed at https://redcarcleveland.uk.engagementhq.com/guisborough-active-travel-route
- Display of Defra 2024 winter campaign poster regarding use of stoves as a heating appliance within all Redcar and Cleveland libraries.
- Display of anti-idling posters outside of 3 schools in Loftus and 4 schools in Brotton during December 2024.
- Display of posters in the autumn of 2024 concerning air pollution from bonfires and alternative means for disposal of gardening vegetation.
- Redcar and Cleveland Borough Council's Energy Management Team, Waste and Recycling Team and Countryside Team joined forces during a visit at Kilton Thorpe Specialist Academy in Brotton to encourage the students to look after the environment and have the tools to do so. They sorted through a mix of recyclables and non-recyclable items and learnt about the importance of switching off electrical devices when not using them to save money, avoid wasting energy and produce unnecessary carbon footprint (February 2024).
- **D109 (STCAS)** - Promotion of affordable warmth schemes across the South Tees Area and Ecoflex4, HUG2, boiler upgrade scheme, Great British Insulation Scheme. HUG 2 funding consortium bid between Stockton-on-Tees, Hartlepool, Redcar and Cleveland and Darlington Borough Councils was launched October 2023 operating until March 2025 and improved 84 homes across the 4 authorities with the installation of a variety of energy improvement schemes including heat pumps, insulation and solar panels. Of the 84 homes improved, 34 were in Redcar and Cleveland. Schemes Ecoflex4 Funding and the Great British Insulation Scheme (GBFS) form part of the Energy Company. During 2024 Redcar and Cleveland has assessed 661 households as eligible to access Ecoflex4 and GBIS funding.

- Redcar and Cleveland Borough Council's Environment Team joined many other local organisations at the Rural Together event organised by Tees Valley Rural Action (April 2024) and showcased their electrical recycling project allowing residents to donate any functional electrics they no longer need so that they can be passed on to people in need through community groups.
- Morrisons supermarket in Redcar ran a weekend of collecting donated small domestic electricals that were in good condition for redistribution to local communities (20th and 21st July 2024).
- **AF13 (STCAS)** - Create environments which encourage physical activity. 'You've Got This (YGT)' is a place-based whole systems change programme, funded by Sports England, that is focussing on new and innovative ways of increasing physical activity at a population level, focussing on policy, environmental and organisational change behaviour. As part of the South Tees Joint Strategic Needs Assessment (JSNA), YGT has led on the creation of the assessments, focussing on creating quality green and blue spaces, sustainable and active travel and building social capital. A partnership approach is being developed to implement the recommendations from the JSNAs, which will focus on enabling more people to be active, creating high quality and better-connected green spaces and promoting active low-carbon forms of travel, all of which will help contribute to improved air quality. YGT have commissioned work from local partners to better understand some of the barriers to cycling and walking more in areas of Redcar & Cleveland and Middlesbrough. Following from this, workstreams will be developed to address some of these barriers.
- Groundwork NE & Community Ventures Ltd working with YGT to address barriers to walking and cycling within the areas of Brambles and Thorntree, Grangetown, North Ormesby and South Bank held a South Tees Active Travel Consultation Event on 28th March 2024. This was part of the 'What are you made of?' campaign.
- Autumn campaign by Redcar and Cleveland Borough Council's Climate Change Team encouraging people help achieve the council become carbon neutral by 2030 by starting to focus on the little things (not just the major big things which have already been done such as moving 36 fleet vehicles to electric, using HVO in road sweepers, installing energy efficient LED lighting and solar panels) as everyone has a part to play.

- The Climate Change and Recycling Team recruited 10 volunteer ECO Champions to help spread knowledge and good practice throughout Redcar and Cleveland (October to November 2024).
- The Recycling Team in October 2024 engaged with residents to play the 'recycling game' where people had to identify which items from their selection can be recycled by the Council, this demonstrated things are not always what they seem. Recycling A-Z | Redcar and Cleveland
- **AF14 (STCAS)** - Explore opportunities with APACE Net Zero to understand the influence of maritime operations on air pollution in South Tees. Due to Middlesbrough Borough Council being part of the Automatic Urban Rural Network (AURN) affiliated to Defra, APACE Net Zero are currently exploring opportunities within Middlesbrough only.
- **AF15 (STCAS)** - Explore opportunities with APACE Net Zero regarding access to their unique solution for acquiring local emissions inventories (resolution 100m) that can serve as the baseline for monitoring and validating the impact of decarbonization measures. Due to Middlesbrough Borough Council being part of the Automatic Urban Rural Network (AURN) affiliated to Defra, APACE Net Zero are currently exploring opportunities within Middlesbrough only.
- **CE02 (STCAS)** - Identify and promote funding streams that are available to everyone to improve air quality: Air quality grant scheme 2023-24 – a bid was made to Defra by Darlington Borough Council on behalf of the 5 Tees Valley Councils' however a letter was received (10/04/2024) advising that the grant would not be funded as the Government were considering whether the scheme could be redesigned to better deliver positive outcomes for local air quality and therefore provide enhanced value for money for tax payers; Coronation Living Heritage Fund https://www.redcar-cleveland.gov.uk/tree-planting-grants-for-community-orchard-creation made available through Defra's Nature for Climate fund. Funding up to £45,000 of funding was secured to establish planting of four new 'micro-woods', 2 in Eston and 2 in Dormanstown; Local Authority Treescape Fund - £56K was secured for tree planting where tree removal has been required due to Ash dieback.
- **ENF02 (STCAS)** - Enforce the new provisions within the Environment Act 2021 with regards to Smoke Control Areas, wood burning stoves and domestic chimneys. During 2024 Redcar and Cleveland Borough Council received 26 service requests regarding wood burning stoves and emissions. Visits were carried out to 7 properties, 5 of which had Defra exempt appliances installed and were burning

compliant fuels, 2 were using non-compliant fuels and were provided with advice to burn authorised fuels only. 6 complaints regarding smoke/smell emissions in the general area were received however there was no evidence to support enforcement action in the form of financial penalties. 7 complaints were received regarding specific chimneys however there was insufficient evidence to support enforcement action. 6 requests for advice were received.

- **ENF03 (STCAS)** - Enforce statutory nuisance provisions within the Environmental Protection Act 1990 with regards to bonfires. During 2024 Redcar and Cleveland Borough Council received 48 service requests regarding domestic garden bonfires/burning. Of these complaints the Council issued 12 letters advising residents that they were under investigation, 3 referrals were made to social housing providers, 1 warning letter was issued and 2 Community Protection Warnings were served, and 2 Community Protection Notices and 2 Fixed Penalty Notices were also issued. 5 service requests were received regarding commercial bonfires however there was insufficient evidence to support enforcement action being taken.
- **ENF04 (STCAS)** - Enforce the provisions of the Clean Air Act 1990 with respect to dark smoke. Redcar and Cleveland Borough Council received 9 complaints of dark smoke from commercial premises and advice was provided. Of these, 2 of the complaints required letters to be issued advising companies they were under investigation for burning commercial waste however, there was insufficient evidence to support any enforcement action being taken.
- **ENF06 (STCAS)** - Provide and maintain an effective air quality monitoring network. Redcar and Cleveland Borough Council has effectively maintained the local air quality monitoring station based at Dormanstown (RED3) via regular calibration and quality assurance checks carried out every year as required. The Council also maintains a network of diffusion tubes at various locations situated around the borough, these tubes are analysed at an accredited laboratory. The Council is committed to the maintenance of the local air quality station for the calendar year 2025, as well as the diffusion tube network and there are no plans to alter this status.
- Traffic management - Urban Traffic Management & Control Centre (UTC), Congestion management, traffic reduction. Motorists in Redcar are set to benefit from 5 new signs providing real-time updates on the status of West Dyke Road key level crossing. The signs are aimed at improving traffic flow and diverting drivers

away from West Dyke Road Level Crossing when rail services halt traffic, which can exacerbate the pollution generated from idling cars at such points in the town. They have been installed following funding from TVCA, in combination with Network Rail, Redcar and Cleveland Borough Council and Middlesbrough Borough Council which operates the Urban Traffic Management & Control Centre overseeing the local road network (September 2024).

Electronic sign on West Dyke Road, Redcar

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

As detailed in Policy Guidance LAQM.PG22 (Chapter 8) and the Air Quality Strategy[1], local authorities are expected to work towards reducing emissions and/or concentrations of fine particulate matter ($PM_{2.5}$)). There is clear evidence that $PM_{2.5}$ (particulate matter smaller 2.5 micrometres) has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases.

Redcar and Cleveland Borough Council is taking the following measures to address $PM_{2.5}$:

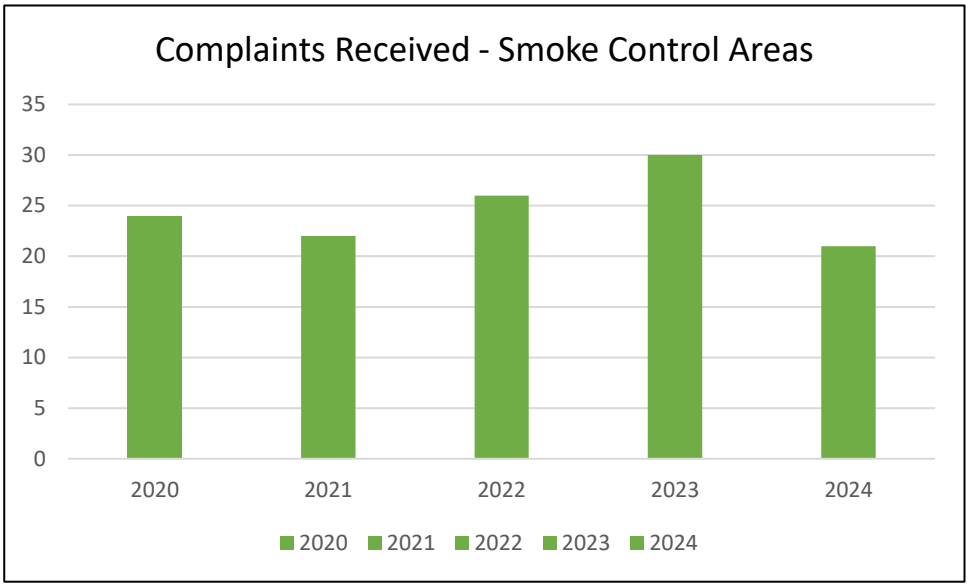
- Enforcement of smoke emissions from domestic properties within Smoke Control Areas (SCA) see Appendix D.

[1] Defra. Air Quality Strategy – Framework for Local Authority Delivery, August 2023

- Use of the planning regime consultation process to identify new sources of $PM_{2.5}$ and apply enforceable conditions to ensure emissions to atmosphere are controlled. Identification of new and changed sources within 2024 have been detailed in Appendix C.
- Continued regulation of industrial processes under the Environmental Permitting Regulations, ensuring use of best practice technologies and operational procedures. At the end of 2024 we had regulated 46 installations with Part B permits and inspected the number required (12) in accordance with the Defra risk assessment process between 01/04/2024 and 31/03/2025.
- Continued commitment to monitor $PM_{2.5}$ at the automatic monitoring station in Dormanstown, as detailed in table A.8 below.
- Redcar and Cleveland Borough Council is one of the five local authorities that forms the TVCA this allows all authorities to have a region wide Transport Plan 2020-2030 that enables improvements to transport links, increase in the provision of EV charging points and improved cycle networks across the whole area.
- The 5 TVCA Councils form the long-standing Tees Valley Environmental Protection Group (TVEPG) with representatives from each local authority Environmental Health Team and the Environment Agency (North East Area) to discuss and highlight air pollution matters.
- Commitment by Redcar and Cleveland Borough Council to increase the number of their own electric / efficient fleet vehicles, utilisation of solar power technologies on Council buildings and promotion of cycling schemes for employees.
- Supporting the ongoing promotion of media campaigns to raise the awareness of the impact of wood burning stoves and bonfires on health and the atmosphere and anti-idling outside of schools across the borough.

Redcar and Cleveland have 51 SCA's covering a large proportion of the borough. A map depicting SCA has been provided in Appendix D. The Environmental Protection Team is responsible for enforcement of excessive smoke emissions from domestic properties within the SCA's. Trend data of complaints received over the last 5 years has been outlined below.

Figure 2.3.1: Trend Data – Complaints within Smoke Control Areas



The number of complaints received has decreased overall in 2024, however in the last 5 years the figures have remained relatively static. During the investigation of complaints Officers within the Environmental Protection Team continue to note sound knowledge of stove and fuel choices, maintenance of appliances and routine chimney sweeping amongst stove owners. During 2024 Redcar and Cleveland investigated 21 complaints and 5 enquiries regarding smoke from domestic properties within the SCA's. The investigations did not result in the issue of any warning / improvement notices or fixed penalties, however, initial complaint letters sent to the properties complained about, highlight the rules within SCA's and health implications. It is hoped that this early notification prohibits the need for further enforcement action as part of the service stepped approach towards enforcement.

Within the TVCA area there are three $PM_{2.5}$ analysers, two sites are part of the AURN one in Middlesbrough and one in Stockton-on-Tees, and the third site is at Dormanstown in Redcar and Cleveland. Annual means for the Dormanstown site are reported in Table A.8.

UK Health Security Agency (UKHSA) provides fingertips data for a wide variety of public health outcomes. The data currently reports two factors relating to health and air quality; fraction of mortality attributable to particulate air pollution and air pollution fine particulate matter – concentrations of total $PM_{2.5}$ highlighting the importance of particulate matter on health. Data for Redcar and Cleveland Borough Council is reported in Table 2.3.1. Data can also be located on the Office for Health Improvement Disparities website.

Table 2.3.1 UK Public Health Outcomes linked to Air Pollution

	England	North East	Redcar & Cleveland	Darlington	Hartlepool	Middlesbrough	Stockton-on-Tees
Fraction of Mortality Attributable to Particulate Air Pollution (%) - 2023							
Fraction	5.2	4.6	4.3	4.4	4.4	4.9	4.6
Air Pollution Fine Particulate Matter – Concentrations of total $PM_{2.5}$ (Mean - µg/m3) - 2023							
Fraction	7	6.1	5.7	5.9	5.8	6.5	6.2

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

This section sets out the monitoring undertaken within 2024 by Redcar and Cleveland Borough Council and how it compares with the relevant air quality objectives. In addition, monitoring results are presented for a five-year period between 2020 and 2024 to allow monitoring trends to be identified and discussed.

3.1 Summary of Monitoring Undertaken

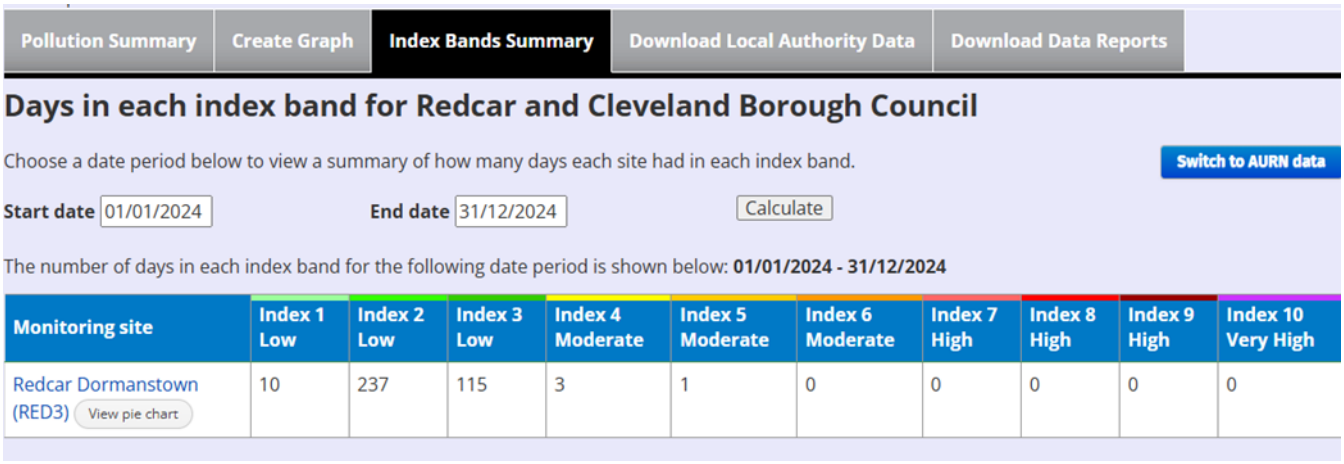
3.1.1 Automatic Monitoring Sites

Redcar and Cleveland Borough Council undertook automatic (continuous) monitoring at one site during 2024. 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 Air quality in England page presents automatic monitoring results for Redcar and Cleveland Borough Council, with automatic monitoring results also available through the UK-Air website UK-Air .

A map showing the locations of the current and historic monitoring sites is provided in Appendix D. Further details on how the monitors are calibrated and how the data has been adjusted are included in Appendix C.

The Redcar and Cleveland automatic monitoring station is based in Dormanstown and has been operational since 2012. The monitoring station is located in a suburban area within the grounds of a local primary academy and is sited within 4km of the two major industrial and chemical complexes in Redcar and Cleveland; Wilton International and Teesworks (the former Redcar steelworks).

During 2024 Redcar and Cleveland monitored oxides of nitrogen (NO_x), ozone (O_3) and particulate matter in fractions PM_{10} and $PM_{2.5}$. Live and historic datasets are available from the AQE website. The website also provides a Daily Air Quality Index (DAQI), a measure used to provide information on air quality, potential air pollution incidents and health advice for the population susceptible to a lower air quality. During 2024 Redcar and Cleveland had no reports over an Index 5 Moderate result as depicted below.



Pollution Summary | Create Graph | Index Bands Summary | Download Local Authority Data | Download Data Reports

Days in each index band for Redcar and Cleveland Borough Council

Choose a date period below to view a summary of how many days each site had in each index band. Switch to AURN data

Start date 01/01/2024 End date 31/12/2024 Calculate

The number of days in each index band for the following date period is shown below: **01/01/2024 - 31/12/2024**

Monitoring site	Index 1 Low	Index 2 Low	Index 3 Low	Index 4 Moderate	Index 5 Moderate	Index 6 Moderate	Index 7 High	Index 8 High	Index 9 High	Index 10 Very High
Redcar Dormanstown (RED3) View pie chart	10	237	115	3	1	0	0	0	0	0

3.1.2 Non-Automatic Monitoring Sites

Redcar and Cleveland Borough Council undertook non- automatic (i.e. passive) monitoring of NO_2 at 13 sites during 2024. Table A.2 in Appendix A presents the details of the non-automatic sites.

Maps showing the locations 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.

The diffusion tube network in Redcar and Cleveland has been operational since 2014, focusing on locations with public exposure, high traffic flows, areas of standing traffic and schools. The diffusion tube network is reviewed on an annual basis to identify areas of new exposure, remove sites in the network that are significantly below the air quality objective level and to ensure that the Borough is represented spatially with monitoring across ward areas. All locations in the network remain in-situ for a minimum of two years.

The 2024 diffusion tube network review rational has been included within the Appendices, Table B.2.

Two new diffusion tube locations were chosen for monitoring during 2024, R65 Beech Grove and R66 New Company Row. R65 is located near a school as Redcar and Cleveland has made a commitment to monitor around school locations to assess for any impact from the ‘school run’. R66 is located near to a complaint site, regarding fumes from cars.

The R62 Stirling Road and R64 Hutton Lane locations were removed at the end of 2023, of the previous two years of data collection both sites had produced an annual mean result of less than 50% of the NO_2 AQ objective level.

The diffusion tube network includes the use of a travel blank to provide a quality check for the transportation of tubes. Monthly, non-bias adjusted, results from the travel blank have been provided and indicate, as has been seen in previous years, that the travel process has a negligible effect on the final diffusion tube results.

ID	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
R00	0.5	0.2	0.4	0.2	0.3	0.3	0.2	0.1	0.2	0.4	0.2	0.5

The diffusion tubes used in the study are 50% trimethylamine (TEA) in acetone, the results have been bias adjusted using the national bias adjustment factor (0.83) and additional information relating to the choice of bias selection is provided in Appendix C.

3.2 Individual Pollutants

The air quality monitoring results presented in this section are, where relevant, adjusted for bias, annualisation (where the annual mean data capture is below 75% and greater than 25%), and distance correction. Further details on adjustments are provided in Appendix C.

3.2.1 Nitrogen Dioxide (NO_2)

Table A.3 and Table A.4 in Appendix A compare the ratified and adjusted monitored NO_2 annual mean concentrations for the past five years with the air quality objective of 40µg/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 2024 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 NO_2 hourly mean concentrations for the past five years with the air quality objective of 200µg/m^3, not to be exceeded more than 18 times per year.

Throughout 2024 there have been no exceedances of the annual mean (40µg/m^3). During 2024 the annual mean trend repeated the recorded result in 2023 of 9µg/m^3, a value last recorded in 2020.

Throughout 2024 there were no exceedances of the 1-hour air quality (200µg/m^3) for NO_2 at the continuous monitoring site.

All diffusion tube locations have measured an annual mean below the 40µg/m^3 objective level.

Trend data results (Table A4) for diffusion tube locations (Table A2) show annual mean concentrations for NO_2 are below the 40µg/m^3 objective. As with previous years Site ID R54, Ormesby Bank 1, remains the highest NO_2 concentration for 2024, however concentrations are reducing from the peak in 2021. Redcar and Cleveland during 2024 have continued to monitor a second location (Site ID R63 Ormesby Bank 2) for a greater understanding of pollutant emissions on the road where the highest level of NO_2 is recorded within the borough. Monthly raw data continues to show a varied NO_2 pattern between the two sites whose locations are similar in nature however one tube is positioned on the façade of a property and the other on a roadside lamppost. Both locations will remain as part of the diffusion tube network in the year ahead.

Diffusion tube data has been bias adjusted using the national correction factor of 0.88. During 2024 four sites suffered a loss of diffusion tubes, no loses resulted in data capture of <75% therefore annualisation was not required.

3.2.2 Particulate Matter (PM_{10})

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 40µg/m^3.

During 2024 the annual mean PM_{10} value has increased to 12.4µg/m^3 compared to the 2023 figure of 10µg/m^3. Although there has been a small increase in the annual mean the value remains significantly below the air quality objective level of 40µg/m^3. Figure A.3 shows long term PM_{10} concentrations for Redcar and Cleveland, which generally depicts a gradual reduction since 1998.

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 50µg/m^3, not to be exceeded more than 35 times per year.

During 2024 Redcar and Cleveland has had no exceedances for this air quality objective.

3.2.3 Particulate Matter ($PM_{2.5}$)

Table A.8 in Appendix A presents the ratified and adjusted monitored $PM_{2.5}$ annual mean concentrations for the past five years.

Redcar and Cleveland have monitored $PM_{2.5}$ since mid-2020 at the automatic monitoring station in Dormanstown and since this date have been able to robustly demonstrate compliance with the 2020 $PM_{2.5}$ target of 20 $\mu g/m^3$.

Prior to this date $PM_{2.5}$ values were calculated using the PM_{10} dataset.

The 2024 annual average remains the same as for 2021-2023 when rounding the figure to 1 decimal place (7$\mu g/m^3$).

The UK Government have outlined in their Air Quality Strategy legally binding targets to see an annual mean concentration of $PM_{2.5}$ of 10$\mu g/m^3$ by 2040. Since monitoring commenced mid-2020, Redcar and Cleveland Borough Council have demonstrated compliance with the UK Government's target.

3.2.4 Ozone (O_3)

Redcar and Cleveland Borough Council have monitored ozone from the current automatic monitoring station in Dormanstown, and the previous site at Corporation Road, since 1998. Ozone is not a required reporting pollutant for LAQM purposes due to its creation via chemical reaction in the atmosphere between NO_x, VOC's and sunlight. Higher concentrations of ozone are noticed during the spring and summer when sunlight levels are at their greatest. It is not always possible to target origins of ozone due to the chemical reactions in atmosphere and ability to travel long distances from original source areas.

During 2024 ozone levels remained very similar, the maximum 8-hour reduced to 103$\mu g/m^3$ (from 104$\mu g/m^3$) while the 8-hour running mean >100$\mu g/m^3$ recorded 10 exceedances over two days, a slight increase from 2023 (9 exceedances over 2 days).

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? (1)	Monitoring Technique	Distance to Relevant Exposure (m) (2)	Distance to kerb of nearest road (m) (1)	Inlet Height (m)
RED3	Redcar Dormanstown	Suburban	458379	523486	NO_2, PM_{10}, $PM_{2.5}$, O_3	No	N/A	NO_2 - Chemiluminescent, PM_{10} - BAM from 2013, $PM_{2.5}$ - BAM from 2020, O_3 - UV Absorption	0.0	150.0	2.5

Notes:

(1) N/A if not applicable

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

Please note Redcar and Cleveland Borough Council utilised results from the LAQM Automatic Data Processing Tool.

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)
R17, R18, R19	Dormanstown	Suburban	458379	523486	NO_2	No AQMA	0.0	150.0	Yes	2.5
R27	West Lane	Roadside	454712	520678	NO_2	No AQMA	42.0	1.0	No	2.0
R51	Broadway	Suburban	455379	520543	NO_2	No AQMA	0.0	10.0	No	2.0

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Tube Co-located with a Continuous Analyser?	Tube Height (m)
R52	West Dyke Road	Suburban	460292	524876	NO_2	No AQMA	0.0	2.1	No	2.5
R54	Ormesby Bank, 1	Roadside	453831	516212	NO_2	No AQMA	8.5	4.4	No	2.5
R55	Church Street	Suburban	461553	516074	NO_2	No AQMA	10.9	2.4	No	2.5
R58	Fabian Road	Roadside	455518	519353	NO_2	No AQMA	15.6	3.0	No	2.5
R59	Redcar Road	Roadside	460869	523657	NO_2	No AQMA	2.1	4.3	No	2.5
R60	Flatts Lane	Roadside	454864	517813	NO_2	No AQMA	11.7	2.0	No	2.5
R61	St Joseph's Lane	Roadside	459695	524414	NO_2	No AQMA	2.5	2.4	No	2.5
R63	Ormesby Bank, 2	Suburban	453462	516420	NO_2	No AQMA	0.0	11.8	No	2.0
R65	Beech Grove	Suburban	453683	519959	NO_2	No AQMA	4.3	2.7	No	2.5
R66	New Company Row	Roadside	471278	519675	NO_2	No AQMA	3.4	2.5	No	2.5

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.

Please note Redcar and Cleveland Borough Council utilised results from the LAQM Diffusion Tube Data Processing Tool.

Table A.3 – Annual Mean NO_2 Monitoring Results: Automatic Monitoring (µg/m^3)

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
RED3	458379	523486	Suburban	99.8	99.8	9.0	11.0	10.0	9.0	8.6

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

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

☐ **Where exceedances of the NO_2 annual mean objective occur at locations not representative of relevant exposure, the fall-off with distance concentration has been calculated and reported concentration provided in brackets for 2024.**

Notes:

The annual mean concentrations are presented as µg/m^3.

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

All means have been "annualised" as per LAQM.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

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

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

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

Please note Redcar and Cleveland Borough Council utilised results from the LAQM Automatic Data Processing Tool.

Table A.4 – Annual Mean NO_2 Monitoring Results: Non-Automatic Monitoring (µg/m^3)

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
R17, R18, R19	458379	523486	Suburban	100.0	100.0	13.2	11.5	11.7	11.6	10.3
R27	454712	520678	Roadside	90.6	90.6	21.0	23.1	20.6	21.1	17.8
R51	455379	520543	Suburban	100.0	100.0	11.7	12.1	11.8	11.5	11.6
R52	460292	524876	Suburban	100.0	100.0	16.3	15.7	14.9	14.8	16.1
R54	453831	516212	Roadside	100.0	100.0	27.3	30.5	24.4	23.9	23.7
R55	461553	516074	Suburban	92.5	92.5	16.3	18.1	15.5	15.6	14.1
R58	455518	519353	Roadside	83.0	83.0		13.8	12.3	12.9	12.6
R59	460869	523657	Roadside	75.0	75.0		13.9	14.0	13.0	12.4
R60	454864	517813	Roadside	90.6	90.6		16.9	17.7	16.0	15.1
R61	459695	524414	Roadside	100.0	100.0			11.7	11.0	10.4
R63	453462	516420	Suburban	100.0	100.0			10.5	10.3	10.1
R65	453683	519959	Suburban	100.0	100.0					9.8
R66	471278	519675	Roadside	100.0	100.0					7.0

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

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

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

Notes:

The annual mean concentrations are presented as µg/m^3.

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

NO_2 annual means exceeding 60µg/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.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

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

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

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

Please note Redcar and Cleveland Borough Council utilised results from the LAQM Diffusion Tube Data Processing Tool.

Figure A.1 – Trends in Annual Mean NO_2 Concentrations

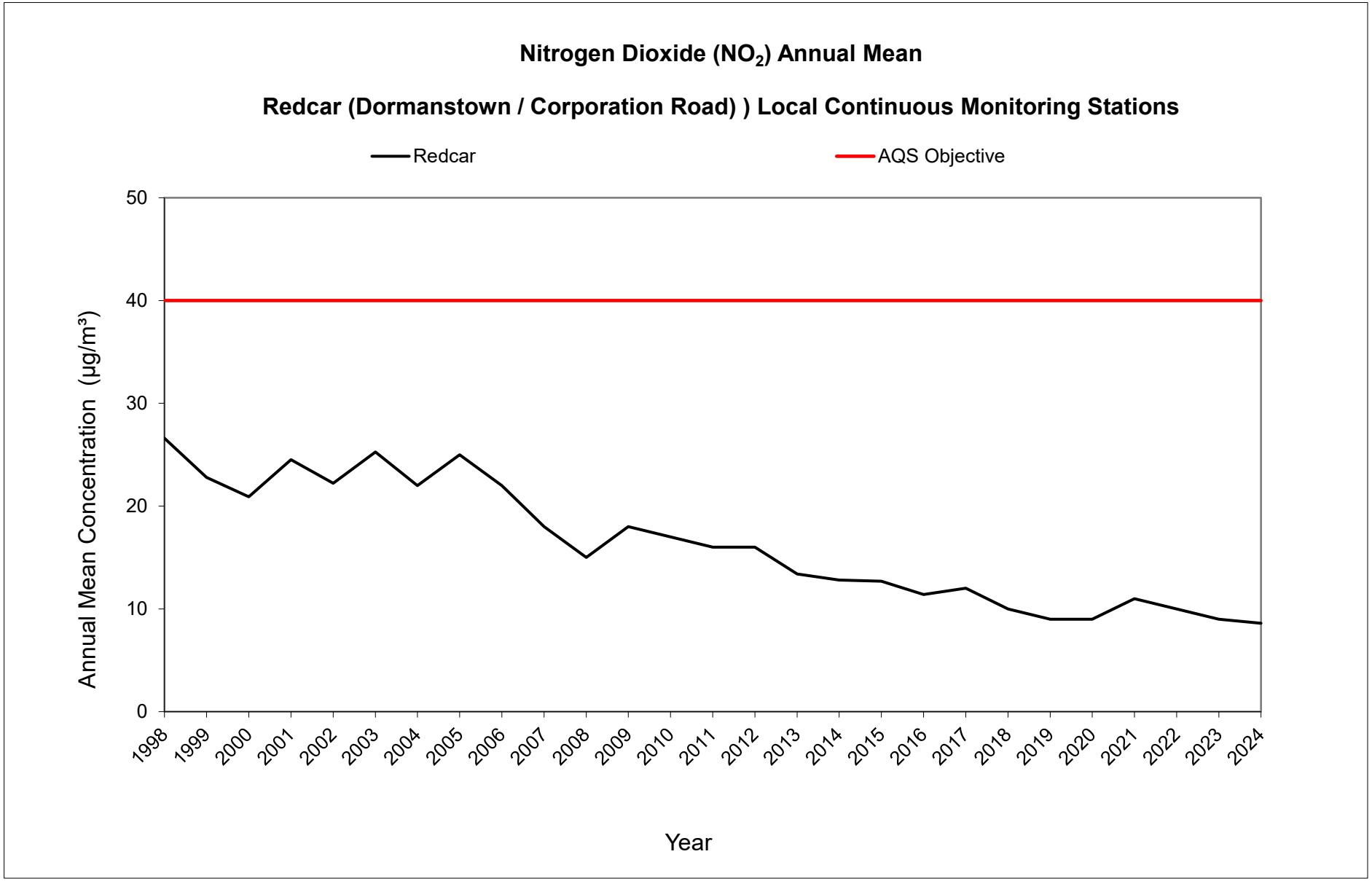


Table A.5 – 1-Hour Mean NO_2 Monitoring Results, Number of 1-Hour Means > 200µg/m^3

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
RED3	458379	523486	Suburban	99.8	99.8	0	0	0	0	0

Notes:

Results are presented as the number of 1-hour periods where concentrations greater than 200µg/m^3 have been recorded.

Exceedances of the NO_2 1-hour mean objective (200µg/m^3 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%).

Please note Redcar and Cleveland Borough Council utilised results from the LAQM Automatic Data Processing Tool.

Figure A.2 – Trends in Annual Mean NO_2 Concentrations at Six Long-term Diffusion Tube Locations across Redcar & Cleveland

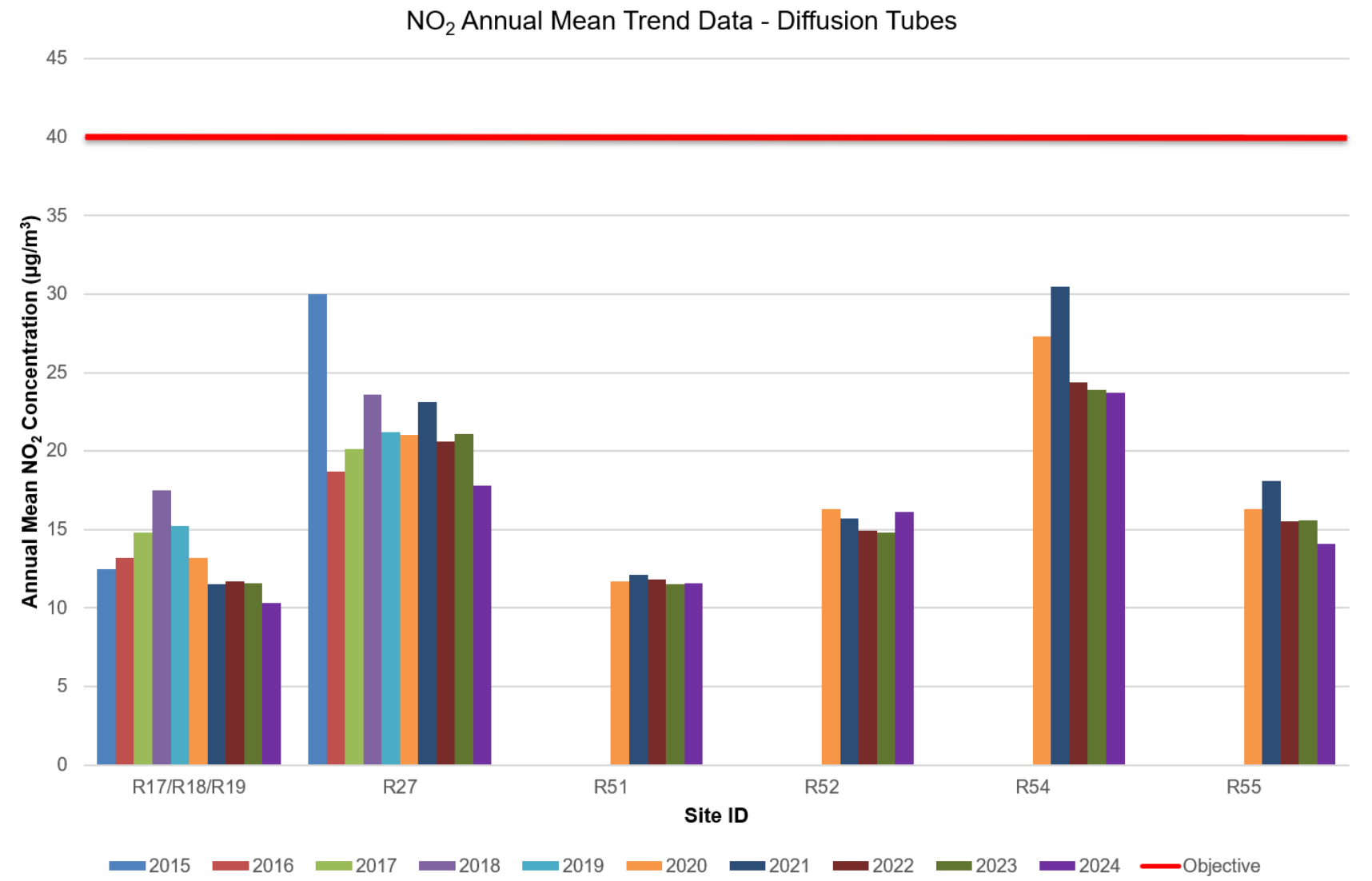


Table A.6 – Annual Mean PM_{10} Monitoring Results (µg/m^3)

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
RED3	458379	523486	Suburban	99.2	99.2	13.0	14.0	14.0	10.0	12.4

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

Notes:

The annual mean concentrations are presented as µg/m^3.

Exceedances of the PM_{10} annual mean objective of 40µg/m^3 are shown in **bold**.

All means have been "annualised" as per LAQM.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

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

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

Please note Redcar and Cleveland Borough Council utilised results from the LAQM Automatic Data Processing Tool.

Figure A.3 – Trends in Annual Mean PM_{10} Concentrations

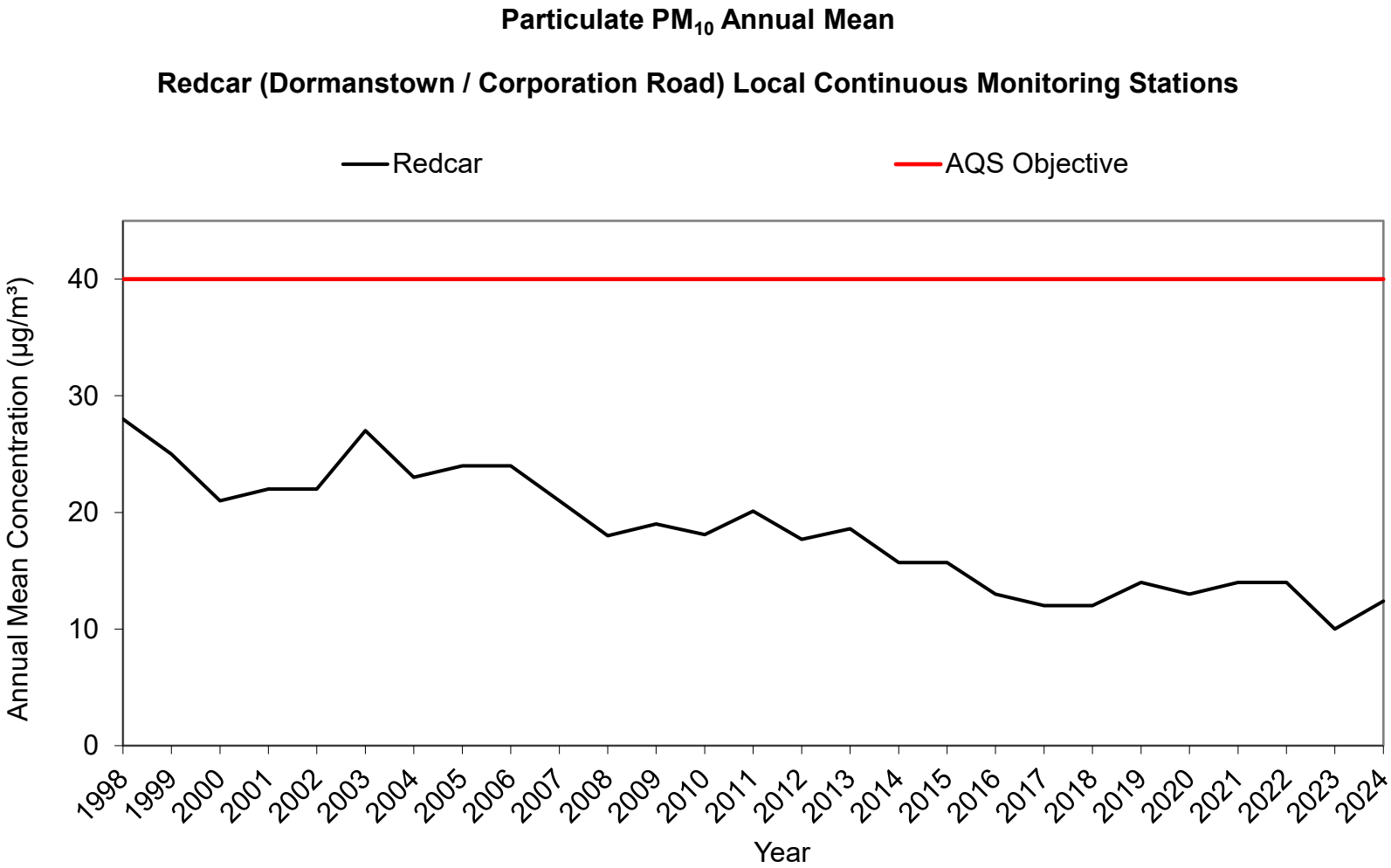


Table A.7 – 24-Hour Mean PM_{10} Monitoring Results, Number of PM_{10} 24-Hour Means > 50µg/m^3

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
RED3	458379	523486	Suburban	99.2	99.2	0	0	3	0	0

Notes:

Results are presented as the number of 24-hour periods where daily mean concentrations greater than 50µg/m^3 have been recorded.

Exceedances of the PM_{10} 24-hour mean objective (50µg/m^3 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%).

Please note Redcar and Cleveland Borough Council utilised results from the LAQM Automatic Data Processing Tool.

Figure A.4 – Trends in Number of 24-Hour Mean PM_{10} Results > 50µg/m³

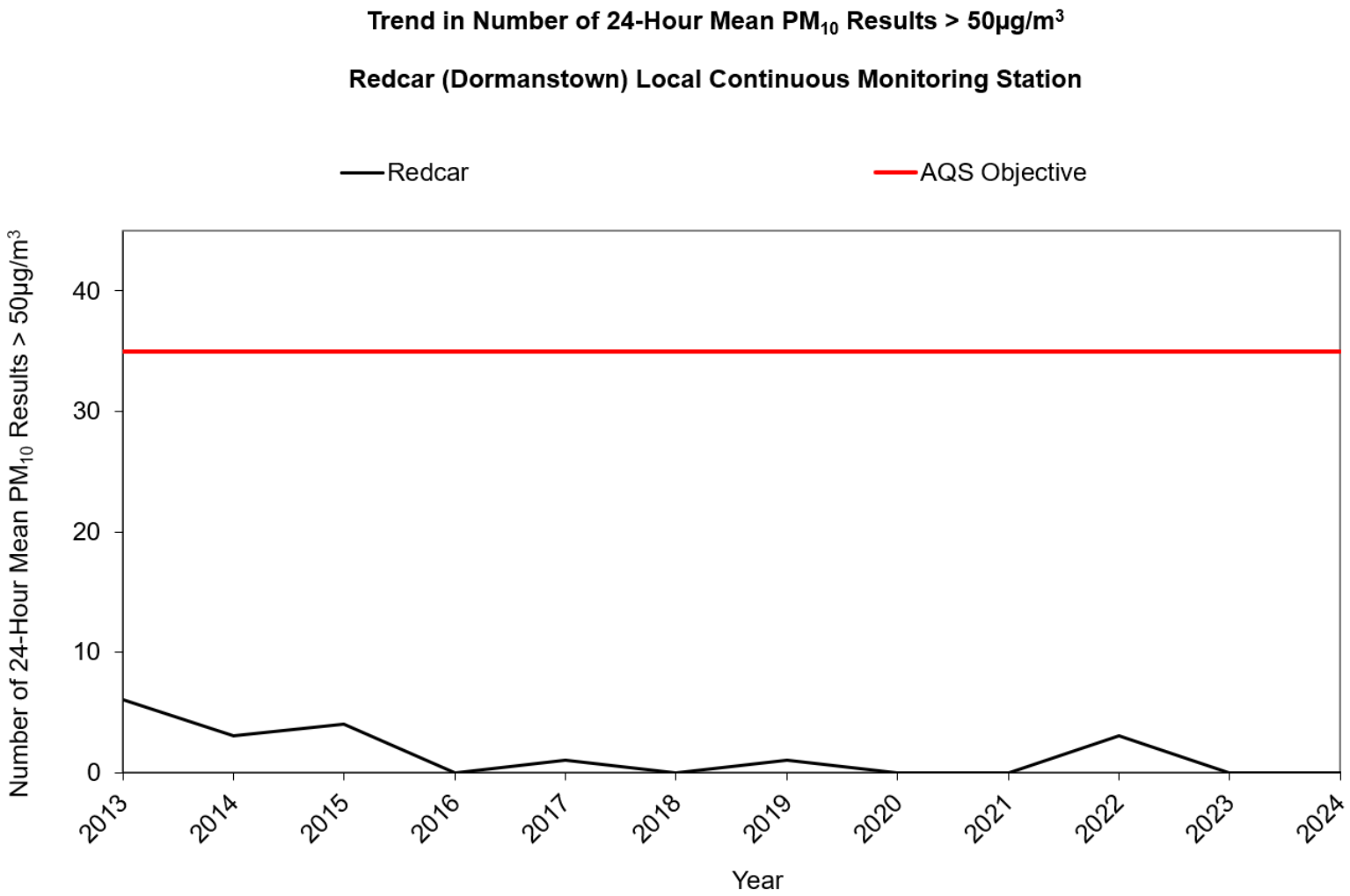


Table A.8 – Annual Mean $PM_{2.5}$ Monitoring Results (µg/m^3)

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
RED3	458379	523486	Suburban	99.5	99.5	9.1*	7.0	7.0	7.0	6.9

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

Notes:

The annual mean concentrations are presented as µg/m^3.

All means have been "annualised" as per LAQM.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

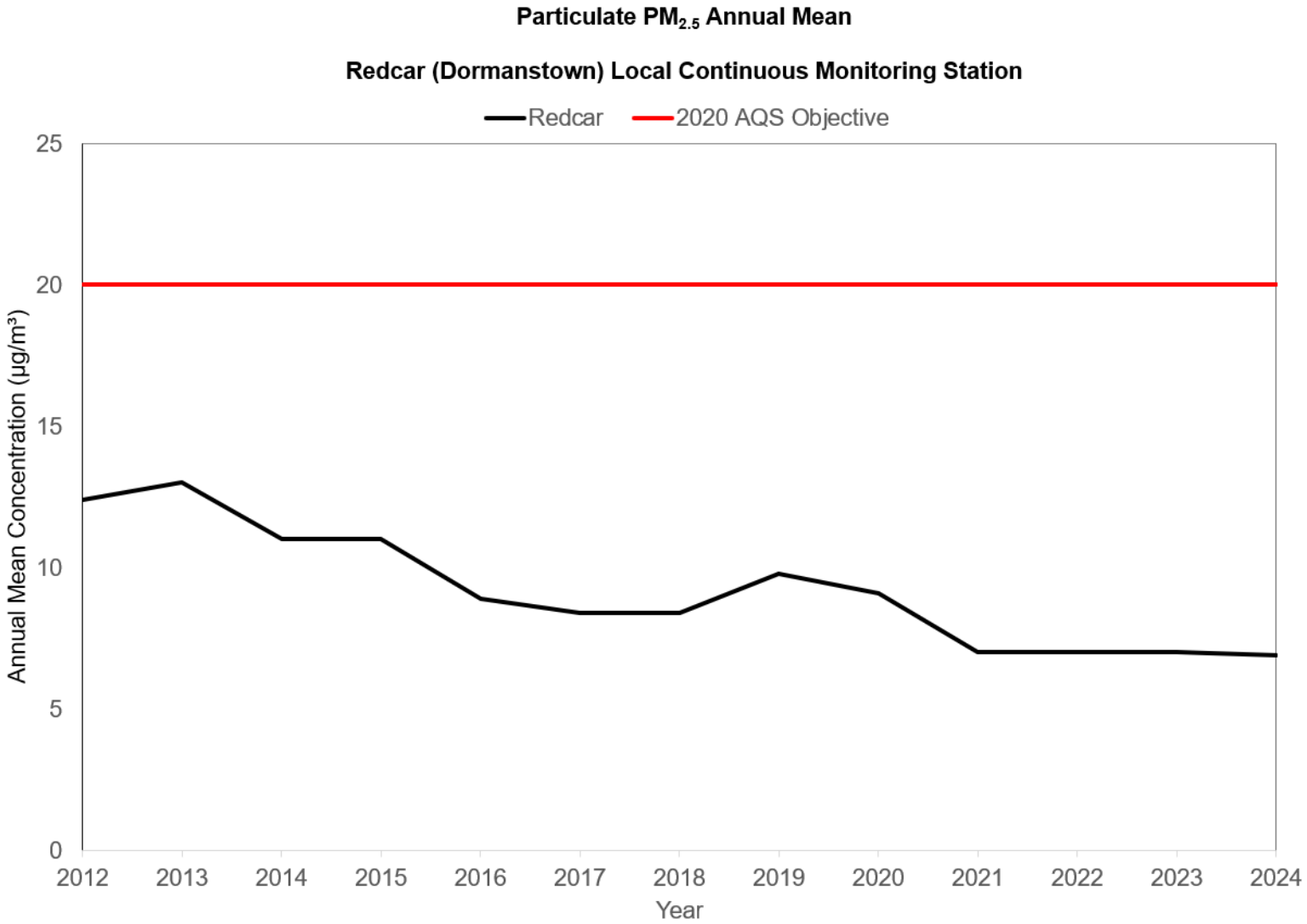
(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

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

*Denotes $PM_{2.5}$ values calculated from PM_{10} data.

Please note Redcar and Cleveland Borough Council utilised results from the LAQM Automatic Data Processing Tool.

Figure A.5 – Trends in Annual Mean $PM_{2.5}$ Concentrations



Appendix B: Full Monthly Diffusion Tube Results for 2024

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

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.88)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
R17	458379	523486	16.6	14.7	9.0	9.7	7.7	9.1	8.0	11.3	10.2	10.9	16.5	15.9	-	-	-	Triplicate Site with R17, R18 and R19 - Annual data provided for R19 only
R18	458379	523486	17.3	18.6	10.3	9.0	8.6	8.8	8.0	10.8	9.3	11.8	14.1	18.2	-	-	-	Triplicate Site with R17, R18 and R19 - Annual data provided for R19 only
R19	458379	523486	13.9	16.5	9.9	7.8	8.7	9.2	9.2	10.4	9.3	12.1	14.5	14.5	11.7	10.3	-	Triplicate Site with R17, R18 and R19 - Annual data provided for R19 only
R27	454712	520678	24.8	-	20.5	20.5	25.2	19.6	10.2	15.6	25.2	19.5	21.1	20.9	20.3	17.8	-	
R51	455379	520543	14.8	13.5	12.1	11.2	10.6	9.5	21.8	8.7	11.8	12.9	16.3	15.6	13.2	11.6	-	
R52	460292	524876	18.6	20.4	16.2	17.9	19.7	15.0	16.6	14.1	18.5	18.3	26.0	17.8	18.2	16.1	-	
R54	453831	516212	31.9	28.9	25.3	31.2	29.6	22.4	25.4	22.1	32.6	24.5	25.5	24.2	27.0	23.7	-	
R55	461553	516074	17.9	21.1	17.0	14.2	14.8	13.9	12.7	12.8	14.6	20.4	-	16.6	16.0	14.1	-	
R58	455518	519353	-	12.6	14.3	13.0	15.3	10.4	10.9	-	18.1	14.5	17.0	17.6	14.4	12.6	-	
R59	460869	523657	17.4	16.1	14.5	10.3	-	8.6	10.2	-	11.1	17.7	20.9	-	14.1	12.4	-	
R60	454864	517813	21.4	-	16.3	13.5	14.6	14.7	15.4	14.0	14.7	17.7	25.3	20.7	17.1	15.1	-	
R61	459695	524414	15.5	15.9	11.7	9.0	9.7	8.8	8.5	8.3	11.5	11.1	15.7	16.4	11.8	10.4	-	
R63	453462	516420	14.6	10.8	12.0	10.5	12.2	6.8	9.1	7.3	15.1	10.8	14.9	13.7	11.5	10.1	-	
R65	453683	519959	14.4	12.4	10.1	9.4	11.1	7.4	7.9	6.1	13.7	10.6	17.1	13.3	11.1	9.8	-	
R66	471278	519675	11.2	8.9	7.8	5.8	5.9	5.5	6.6	6.7	7.8	8.1	12.5	8.9	8.0	7.0	-	

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

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

☐ **Local bias adjustment factor used.**

☒ **National bias adjustment factor used.**

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

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

Notes:

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

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

See Appendix C for details on bias adjustment and annualisation.

Table B.2 – Diffusion Tube Review 2024

Tube ID	Site Name	Retain / Remove / New	Justification
R17/R18/R19	Dormanstown	Retain	Co-location study at the site of the automatic monitoring station.
R27	West Lane	Retain	Long-term location site to monitor emissions from the nearby A66 main arterial through road.
R51	Broadway	Retain	Area of good public exposure and located close to main link road through borough.
R52	West Dyke Road	Retain	Area of good public exposure and in proximity of Redcar Central Railway Station.
R54	Ormesby Bank (1)	Retain	Location reports the highest annual NO_2 results, monitoring supported by additional site close by (R63).
R55	Church Street	Retain	Site in area of good exposure and location of higher NO_2 results for Redcar and Cleveland.
R58	Fabian Road	Retain	Site in area of good public exposure, agree to keep for informing longer term trend results.
R59	Redcar Road	Retain	Site in area of good public exposure, agree to keep for informing longer term trend results.
R60	Flatts Lane	Retain	Site in area of good public exposure, agree to keep for informing longer term trend results.
R61	St Josephs Court	Retain	Site in area of good public exposure, agree to keep for informing longer term trend results.
R62	Stirling Road	Remove	2-year monitoring has shown annual mean results average less than 50% of the AQ objective level.
R63	Ormesby Bank (2)	Retain	Site in area of good public exposure, agree to keep for informing longer term trend results and supports R54 monitoring.
R64	Hutton Lane	Remove	2-year monitoring has shown annual mean results average less than 50% of the AQ objective level.
R65	Beech Grove	New	Area of good public exposure and in proximity of Mackenzie Thorpe Centre School.
R66	New Company Row	New	Area located near to a complaint about car fumes.

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

New or Changed Sources Identified Within Redcar and Cleveland Borough Council During 2024

Redcar and Cleveland Borough Council has identified the following potential new sources relating to air quality during the 2024 reporting year. The sources listed below have been identified as part of the planning regime and include applications for renewable energies and additional electric vehicle (EV) charging points.

- R/2023/0793/ESM – Hybrid Application to Include Detailed Planning Permission for the Erection of Steel Manufacturing Facility (Electric Arc Furnace) and Outline Permission for Associated Buildings, Apparatus and Infrastructure (All Matters Reserved)
- R/2023/0820/ESM – Hazardous Waste To Energy Process Plant
- R/2024/0005/ESM– Reserved Matters Application (Appearance, Layout, Access, Scale and Landscaping) Following outline approval R/2020/0820/ESM in respect of an Electrolytic Hydrogen Manufacturing Facility (Use Class B2) (Phase 1)
- R/2024/0098/ESM – Full planning application for port handling facility and overland conveyor, above and below ground infrastructure, internal access roads, car parking, landscaping and supporting utility infrastructure.
- R/2024/0216/FF - Erection of a drive thru unit and an EV charging hub; including 1 No. electricity substation; car parking; cycle parking; hard and soft landscaping; a refuse storage area and associated works.
- R/2024/0271/ESM – Construction of an electrolytic low carbon hydrogen production facility, hydrogen export pipeline network, electricity and water connections, including water supply and effluent discharge, above ground installations, construction and laydown areas, and ancillary development
- R/2024/0663/PNS - Prior notification under Schedule 2 part 14 Class J of the Town & Country Planning (General Permitted Development) Order 2015 (as amended) for proposed installation of roof mounted solar PV panels

- R/2024/0666/PNS - Prior notification under Schedule 2 part 14 Class J of the Town & Country Planning (General Permitted Development) Order 2015 (as amended) for proposed installation of roof mounted solar PV panels
- R/2024/0675/FF - Replacement Modular Building plus inclusion of photovoltaic cells to roof and accessible ramp
- R/2024/0718/PNS - Prior notification under Schedule 2 part 14 Class J of the Town & Country Planning (General Permitted Development) Order 2015 (as amended) for the proposed installation of roof mounted 74.32kW PV system comprising of 167 Solar PV Panels
- R/2024/0798/FFM - Installation of a Solar Farm including photovoltaic panels and associated infrastructure

The following consultations regarding Environmental Permitting Regime Applications were received from the Environment Agency:

- EA Environmental Permitting Consultation: EPR/WE3647AC/A001 IEX Technologies Ltd, Innovation Accelerator, Wilton Centre, Redcar
- EPR/AP3627SL/A001 Tees Valley EA Environmental Permitting Consultation: Energy Recovery Facility, Grangetown Prairie, Teesworks
- EA Environmental Permitting Consultation: EPR/FP3024SN/A001 Willis Sustainable Fuels. "Teesside Sustainable Aviation Fuel Refinery", Dormans Point, Tees Dock Road, Redcar
- EA Environmental Permitting Consultation: EPR/HP3395VH/V002 Biffa Waste Services, Brunel Road, Middlesbrough

Redcar and Cleveland Borough Council have a number of large-scale developments progressing through the planning process which have the potential to be sources of air quality changes during construction and operational phases. The following development and associated planning applications during 2024 have been:

- Teesworks redevelopment on the former Redcar steelworks had a large number of applications, mainly conditional discharge: R/2024/0043/FF, R/2024/0177/CD, R/2024/0292/FFM, R/2024/0321/FFM, R/2024/0388/CD, R/2024/0418/SC, R/2024/0414/CD, R/2024/0412/FF, R/2024/0512/CD, R/2024/0511/CD, R/2024/0510/CD, R/2024/0541/CD, R/2024/0644/FFM, R/2024/0690/NM, R/2024/0801/CD, R/2024/0822/CD, R/2024/0821/CD, R/2024/0820/ESM,

R/2024/0819/ESM, R/2024/0841/CD, R/2024/0840/CD, R/2024/0839/ESM, R/2024/0838/ESM, R/2024/0817/CD, R/2024/0867/CD, R/2024/0866/FFM.

- The Woodsmith Project spanning two local authority areas (Redcar and Cleveland Borough Council and North Yorkshire Council) for the development of a polyhalite mine and underground tunnel transfer system: R/2024/0098/ESM , R/2024/0121/NM, R/2024/0264/CD

Additional Air Quality Works Undertaken by Redcar and Cleveland Borough Council During 2024

Redcar and Cleveland Borough Council, in association with Middlesbrough Borough Council implemented the STCAS for the reporting period of 2024. An update on the strategy has been provided within this 2025 ASR (Section 2.2 and Table 2.2). The STCAS can be located on the Redcar and Cleveland Borough Council website.

QA/QC of Diffusion Tube Monitoring

Gradko International Limited provided Redcar and Cleveland Borough Council with the 12-months 2024 diffusion tube supply using 50% Trimethylamine (TEA) in Acetone. Gradko are a UKAS accredited laboratory and participate in the AIR-PT analysis scheme. The most recent round of results, June 2022 to June 2024, showed Gradko achieved 100% of results determined to be satisfactory.

Changeover of the diffusion tubes was completed in accordance with the 2024 national calendar without any deviation. Diffusion tubes are deployed in accordance with LAQM Guidance to ensure correct installation over the specified exposure time period.

Diffusion Tube Annualisation

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

Diffusion Tube Bias Adjustment Factors

The diffusion tube data presented within the 2025 ASR have been corrected for bias using an adjustment factor. Bias represents the overall tendency of the diffusion tubes to under or over-read relative to the reference chemiluminescence analyser. LAQM.TG22 provides guidance regarding the application of a bias adjustment factor to correct diffusion tube monitoring. Triplicate co-location studies can be used to determine a local bias factor based on the comparison of diffusion tube results with data taken from NO_x/NO_2 continuous analysers. Alternatively, the national database of diffusion tube co-location surveys provides bias factors for the relevant laboratory and preparation method.

Redcar and Cleveland Borough Council have applied a national bias adjustment factor of 0.88 to the 2024 monitoring data. A summary of bias adjustment factors used by Redcar and Cleveland Borough Council over the past five years is presented in

The Gradko International Limited bias figure for 2024 has used results from the national database of 12 co-location studies for which Redcar and Cleveland Borough Council contributes data towards. The 12 studies used to derive the 2024 national bias adjustment factor had 11 locations with 'Good' tube precision and study lengths of 10 months or greater. Version 04/25 of the National Diffusion Tube Bias Adjustment Factor has been used for the 2024 reporting year.

National Diffusion Tube Bias Adjustment Factor Spreadsheet — Spreadsheet Version Number: 04/25

Follow the steps below **in the correct order** to show the results of **relevant** co-location studies
Data only apply to tubes exposed monthly and are not suitable for correcting individual short-term monitoring periods
Whenever presenting adjusted data, you should state the adjustment factor used and the version of the spreadsheet
This spreadsheet will be updated every few months: the factors may therefore be subject to change. This should not discourage their immediate use.

This spreadsheet will be updated at the end of June 2025

LAQM Helpdesk Website

The LAQM Helpdesk is operated on behalf of Defra and the Devolved Administrations by Bureau Veritas, in conjunction with contract partners AECOM and the National Physical Laboratory.

Spreadsheet maintained by the National Physical Laboratory. Original compiled by Air Quality Consultants Ltd.

Step 1: Select the Laboratory that Analyses Your Tubes from the Drop-Down List. If a laboratory is not shown, we have no data for this laboratory.

Step 2: Select a Preparation Method from the Drop-Down List. If a preparation method is not shown, we have no data for this method at this laboratory.

Step 3: Select a Year from the Drop-Down List. If a year is not shown, we have no data[2]

Step 4: Where there is only one study for a chosen combination, you should use the adjustment factor shown with caution. Where there is more than one study, use the overall factor[3] shown in blue at the foot of the final column.

If you have your own co-location study then see footnote[4]. If uncertain what to do then contact the Local Air Quality Management Helpdesk at LAQMHelpdesk@bureauveritas.com or 0800 0327953

Analysed By[1]	Method (To undo your selection, choose (All) from the pop-up list)	Year[5] (To undo your selection, choose (All))	Site Type	Local Authority	Length of Study (months)	Diffusion Tube Mean Conc. (Dm) (µg/m³)	Automatic Monitor Mean Conc. (Cm) (µg/m³)	Bias (B)	Tube Precision[6]	Bias Adjustment Factor (A) (Cm/Dm)
Gradko	50% TEA in Acetone	2024	UB	City Of London Corporation	10	26	21	26.8%	G	0.79
Gradko	50% TEA in Acetone	2024	R	City Of London Corporation	12	34	30	12.1%	G	0.89
Gradko	50% TEA in Acetone	2024	UB	Falkirk Council	11	13	13	-1.6%	G	1.02
Gradko	50% TEA in acetone	2024	SU	Redcar And Cleveland Borough Council	12	12	9	35.4%	G	0.74
Gradko	50% TEA in acetone	2024	KS	Marylebone Road Intercomparison	11	43	36	20.8%	G	0.83
Gradko	50% TEA in acetone	2024	R	Sandwell Mbc	12	30	25	24.2%	G	0.81
Gradko	50% TEA in acetone	2024	UB	Sandwell Mbc	12	19	17	8.0%	G	0.93
Gradko	50% TEA in acetone	2024	R	Sandwell Mbc	12	20	20	-2.6%	S	1.03
Gradko	50% TEA in Acetone	2024	R	London Borough Of Merton	12	27	22	25.7%	G	0.80
Gradko	50% TEA in acetone	2024	UB	London Borough Of Wandsworth	10	19	14	31.7%	G	0.76
Gradko	50% TEA in acetone	2024	R	London Borough Of Richmond Upon Thames	12	18	19	-9.1%	G	1.10
Gradko	50% TEA in acetone	2024	B	London Borough Of Richmond Upon Thames	12	13	13	5.0%	G	0.95
Gradko	50% TEA in acetone	2024		Overall Factor[3] (12 studies)				Use		0.88

Redcar and Cleveland Borough Council has a single co-location study within the Borough located at the automatic monitoring site in Dormanstown. The national bias adjustment factor has been regularly used at Redcar and Cleveland, as identified in Table C.2; this has continued for the 2024 reporting year. Use of the national figure has been chosen as this provides a more conservative adjustment value than that which would be offered from

a single local bias adjustment factor from one co-location study. The local bias adjustment calculation for the 2024 data is provided in Table C.3.

Table C.2 – Bias Adjustment Factor

Monitoring Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	04/25	0.88
2023	National	03/24	0.83
2022	National	03/23	0.82
2021	National	03/22	0.83
2020	National	03/21	0.82

Table C.3 – Local Bias Adjustment Calculation

Redcar and Cleveland Borough Council has not used a local bias adjustment factor for 2024 data, however an overview of the calculation used to determine the local bias factor has been outlined below for information only.

	Local Bias Adjustment Input 1
Periods used to calculate bias	12
Bias Factor A	0.75 (0.69 - 0.81)
Bias Factor B	34% (24% - 44%)
Diffusion Tube Mean (µg/m^3)	11.7
Mean CV (Precision)	7.7%
Automatic Mean (µg/m^3)	8.7
Data Capture	100%
Adjusted Tube Mean (µg/m^3)	9 (8 - 9)

NO_2 Fall-off with Distance from the Road

Wherever possible, monitoring locations are representative of exposure. However, where this is not possible, the NO_2 concentration at the nearest location relevant for exposure has been estimated using the Diffusion Tube Data Processing Tool/NO_2 fall-off with distance calculator available on the LAQM Support website. Where appropriate, non-

automatic annual mean NO_2 concentrations corrected for distance are presented in Table B.1.

No diffusion tube NO_2 monitoring locations within Redcar and Cleveland Borough Council required distance correction during 2024.

QA/QC of Automatic Monitoring

Redcar and Cleveland's automatic monitoring station, Dormanstown (RED3), monitored the following pollutants during 2024:

- NO_x
- PM_{10}
- $PM_{2.5}$
- O_3

A full-service contract is utilised via the analyser suppliers to complete routine maintenance and fault rectification. The continuous monitoring data is collected and rescaled by Ricardo-AEA, historic datasets are available on-line for public viewing on the AQE website. Local Site Operator (LSO) duties continue to be undertaken by two officers from the Environmental Protection Team to build in resilience and prevent delays in response to faults.

Redcar and Cleveland Borough Council remain committed to fortnightly calibration visits to the Dormanstown (RED3) site to ensure robust data capture to provide a representative overview of ambient air quality across the area. This is ensured by completing regular calibration visits, validation of data and a detailed documentation of actions undertaken. This process maintains a high level of officer knowledge within the Environmental Protection Team.

Further detail regarding QA/QC processing within Redcar and Cleveland is provided below:

Calibration	Daily 'automatic' calibration with routine fortnightly checks by two experienced and trained members of the Environmental Protection Team. Calibration gas supplied by an approved gas standard business. Annual certification of the site is completed by Ricardo-AEA, last certificate (06958) dated 23 August 2024. Service of the analysers is undertaken after the calibration certification.

Equipment	A comprehensive service agreement is in place with the analyser supplier.
Data Capture	Site operators are experienced and trained personnel. Monitoring data capture is inspected daily, where possible, by Ricardo-AEA to ensure that faults are detected and corrected quickly.
Ratification	Data verification is an on-going process to identify unusual measurements. Data ratification reviews all calibrated data, information from analyser services, repairs and any other information available for the particular site or analyser over the ratification period. In addition, the results from independent QA/QC audits are incorporated to take account of any problems detected during audits, such as: • Long-term drift in ozone instrument calibration • Faulty NO_x converters • Drifts in calibration cylinder concentrations • Instrument leaks or flow fault • Faulty instrument configuration Incorporation of the QA/QC audits ensures that ratified data is traceable to UK national and international gas calibration standards.

PM_{10} and $PM_{2.5}$ Monitoring Adjustment

The PM_{10} and $PM_{2.5}$ automatic analysers at the RED3 site are BAM gravimetric equivalence for particulate matter. The PM_{10} analyser has been subject to the Ricardo Energy and Environment correction factor.

Automatic Monitoring Annualisation

During 2024 the RED3 automatic monitoring station recorded a data capture greater than 75% for all analysers, therefore annualisation of automatic data was not required. The 2024 data capture range at the RED3 site was 99.2% for PM_{10}, 99.5% for $PM_{2.5}$ and 99.8% for NO_2.

NO_2 Fall-off with Distance from the Road

Wherever possible, monitoring locations are representative of exposure. However, where this is not possible, the NO_2 concentration at the nearest location relevant for exposure has been estimated using the NO_2 fall-off with distance calculator available on the LAQM Support website. Where appropriate, automatic annual mean NO_2 concentrations corrected for distance are presented in Table A.3.

No automatic NO_2 monitoring locations within Redcar and Cleveland Borough Council required distance correction during 2024.

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

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

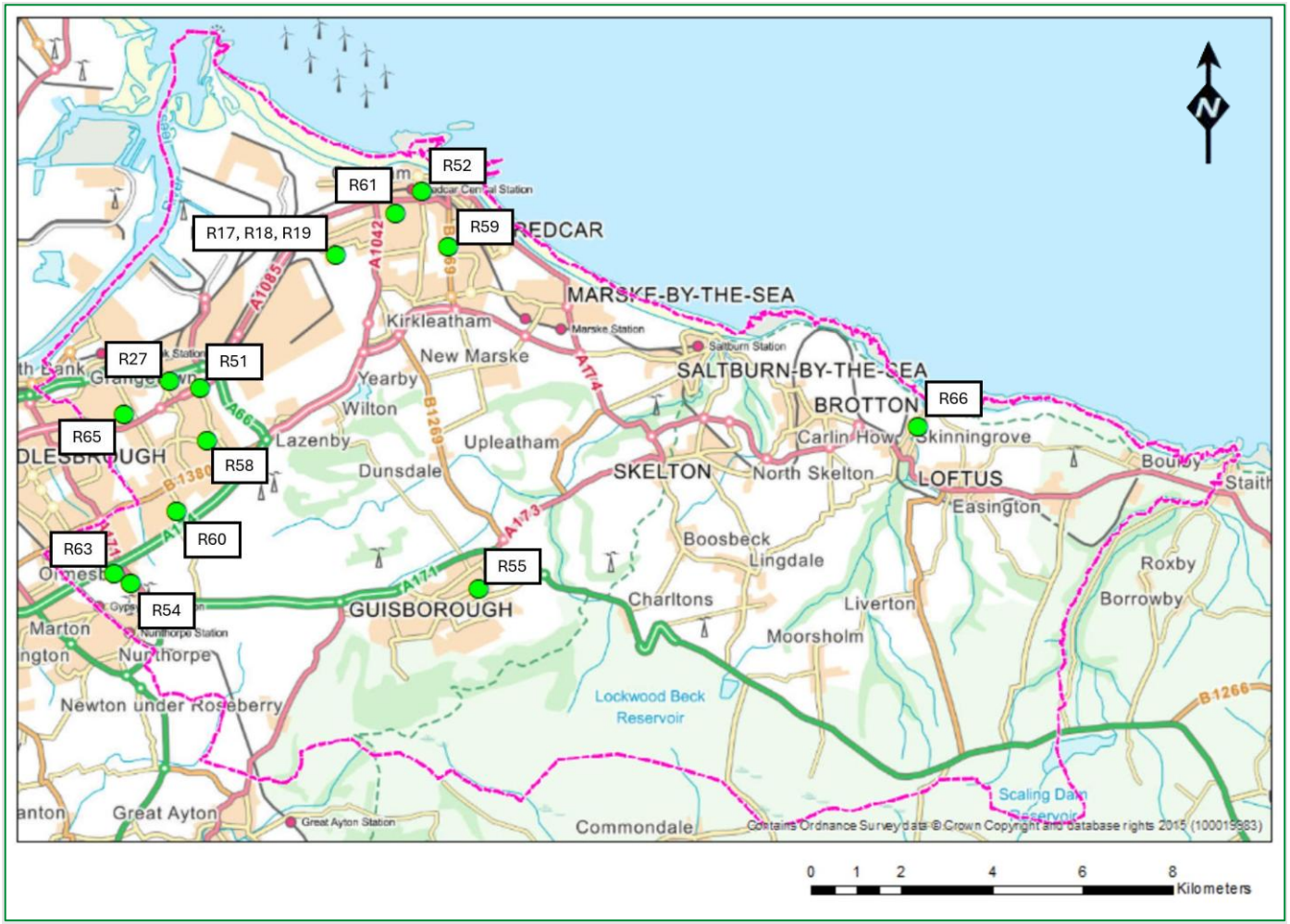


Figure D.2 – Automatic Monitoring Location and Historic Monitoring Site

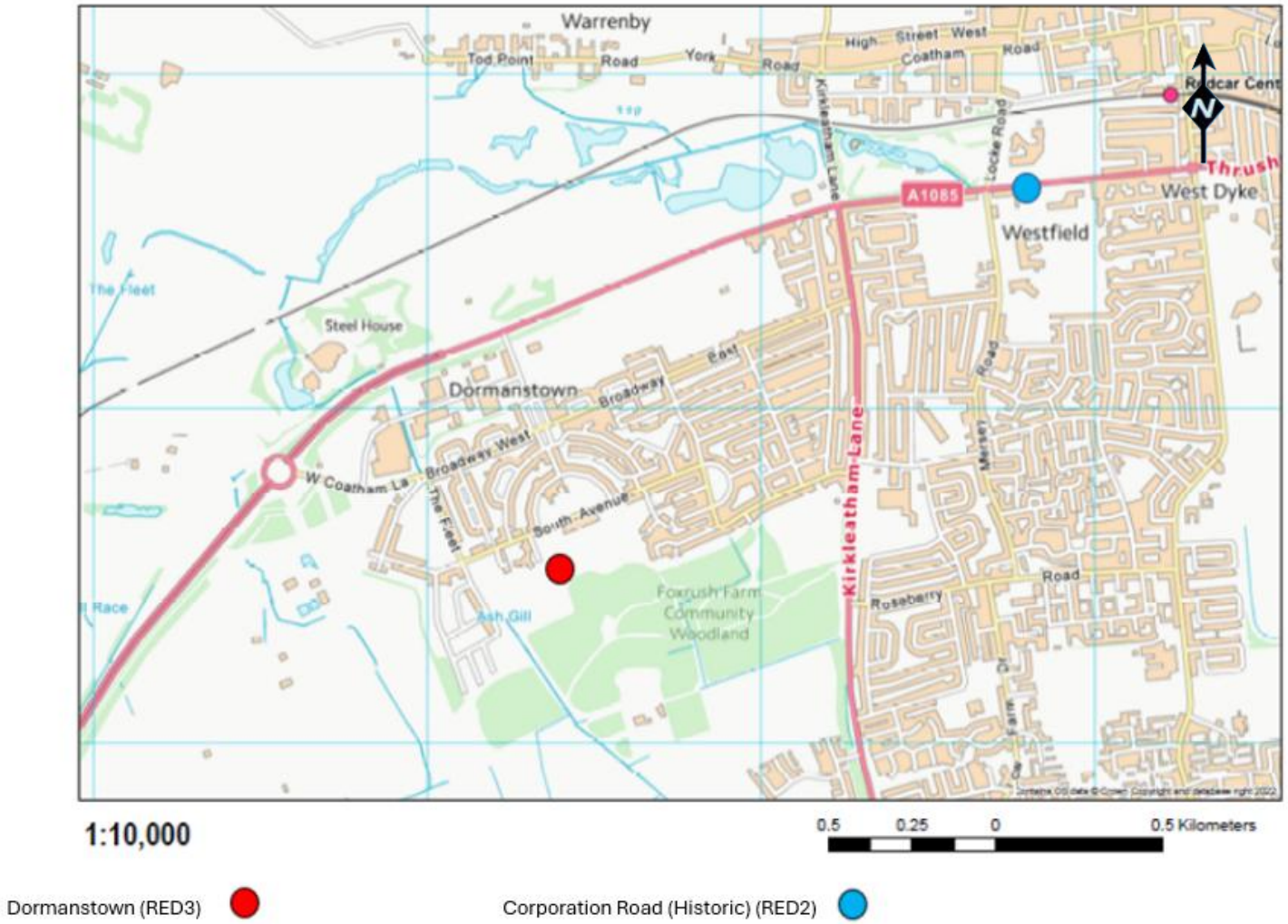


Figure D.3 – Map of Guisborough Area Non-Automatic Monitoring Sites

Figure D.4 – Map of Redcar Area Non-Automatic Monitoring Sites

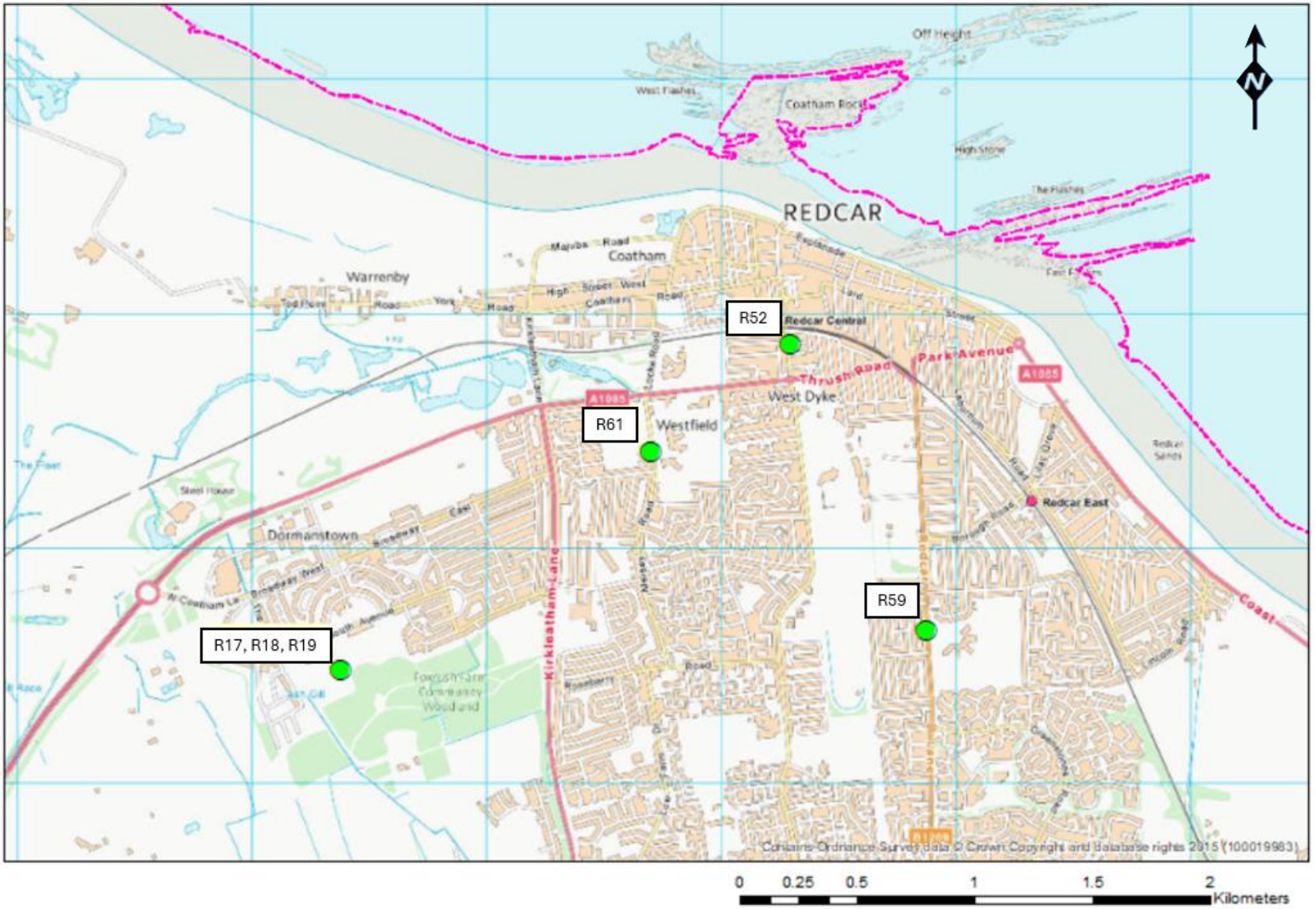


Figure D.5 – Map of Grangetown and South Bank Area Non-Automatic Monitoring Sites

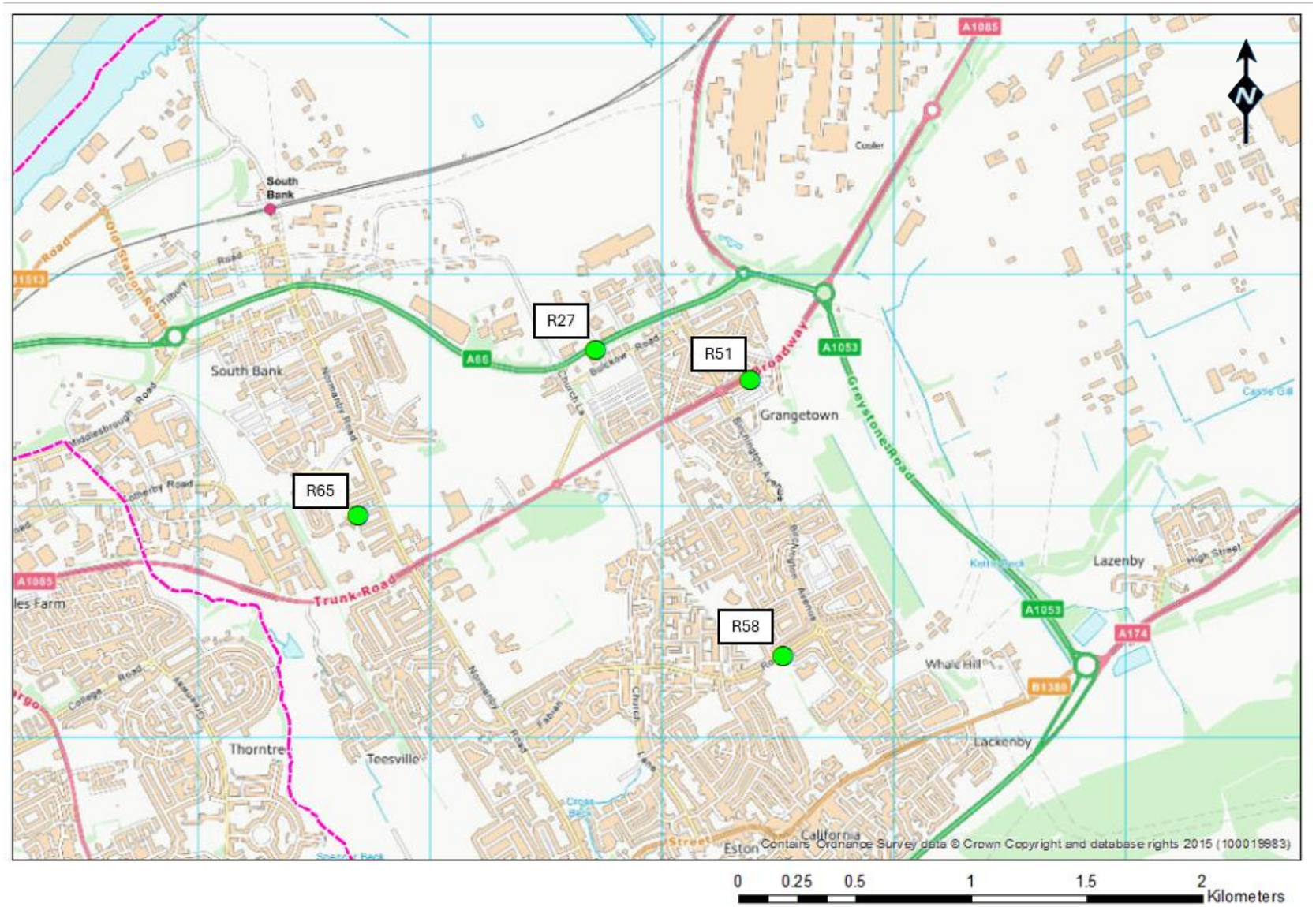


Figure D.6 – Map of Ormesby and Normanby Non-Automatic Monitoring Sites

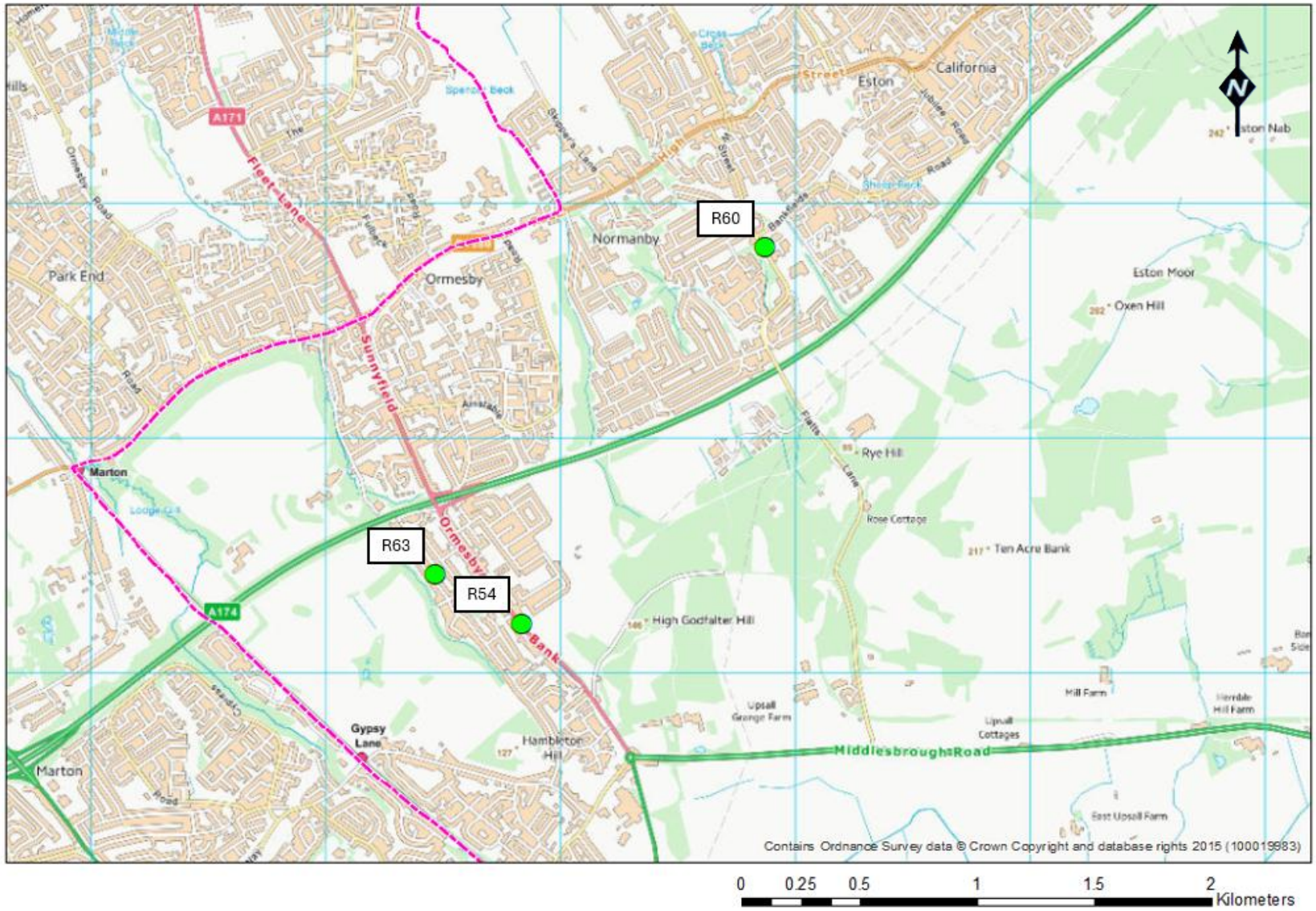


Figure D.7 – Map of Skinningrove Non-Automatic Monitoring Sites

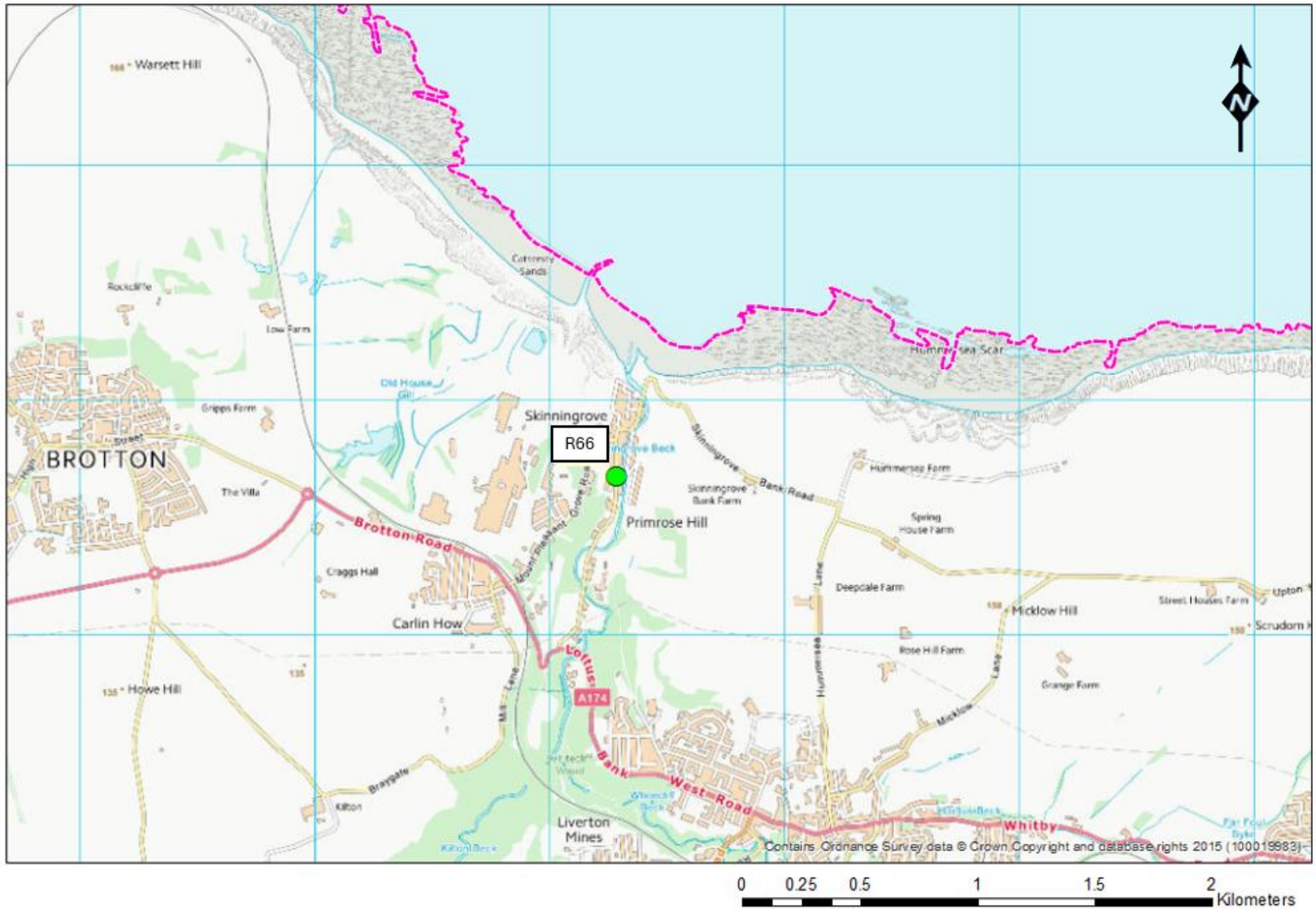


Figure D.8 – Map of Smoke Control Areas

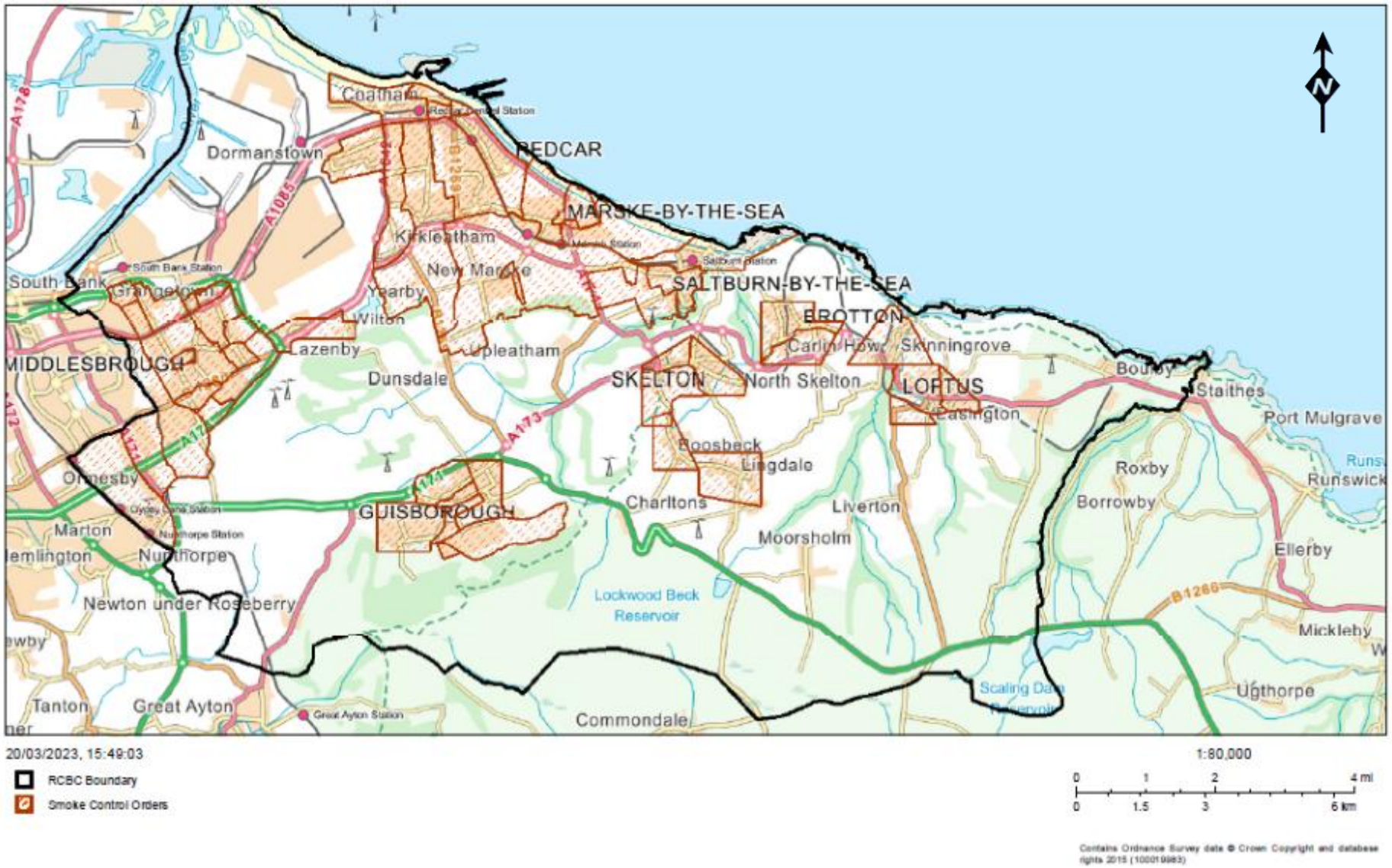


Figure D.9 – Map of South Tees Area

Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England[2]

Pollutant	Air Quality Objective: Concentration	Air Quality Objective: Measured as
Nitrogen Dioxide (NO_2)	200µg/m^3 not to be exceeded more than 18 times a year	1-hour mean
Nitrogen Dioxide (NO_2)	40µg/m^3	Annual mean
Particulate Matter (PM_{10})	50µg/m^3, not to be exceeded more than 35 times a year	24-hour mean
Particulate Matter (PM_{10})	40µg/m^3	Annual mean
Sulphur Dioxide (SO_2)	350µg/m^3, not to be exceeded more than 24 times a year	1-hour mean
Sulphur Dioxide (SO_2)	125µg/m^3, not to be exceeded more than 3 times a year	24-hour mean
Sulphur Dioxide (SO_2)	266µg/m^3, not to be exceeded more than 35 times a year	15-minute mean

[2] The units are in microgrammes of pollutant per cubic metre of air (µg/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
ATE	Active Travel England
BSIP	Bus Service Improvement Plan
CRSTS	The City Region Sustainable Transport Settlement
DAQI	Daily Air Quality Index
Defra	Department for Environment, Food and Rural Affairs
DfT	Department of Transport
ECO	Energy Grant Obligation
EVC	Electric Vehicle Charging
FDMS	Filter Dynamics Measurement System
JSNA	Joint Strategic Needs Assessment
HUG	Home Upgrade Grant
LAQM	Local Air Quality Management
LED	Light Emitting Diode
LUP	Levelling Up Fund
NCN	National Cycle Network
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
OZEV	Office for Zero Emission Vehicles
O_3	Ozone
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

Abbreviation	Description
SCA	Smoke Control Area
STCAS	South Tees Clean Air Strategy
SO_2	Sulphur Dioxide
TEA	Trimethylamine
TVEPG	Tees Valley Environmental Protection Group
TVCA	Tees Valley Combined Authority
UKHSA	United Kingdom Health Security Agency
UTC	Urban Traffic Control
VOC	Volatile Organic Compounds
YGT	You've Got This

References

- Local Air Quality Management Technical Guidance LAQM.TG22. August 2022. Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland.
- Local Air Quality Management Policy Guidance LAQM.PG22. August 2022. Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland.
- Chemical hazards and poisons report: Issue 28. June 2022. Published by UK Health Security Agency
- Air Quality Strategy – Framework for Local Authority Delivery. August 2023. Published by Defra.