

TITLE	Air Quality Update
FOR CONSIDERATION BY	Overview and Scrutiny Management Committee Tuesday 6 th February 2024
WARD	(none specific);
LEAD OFFICER	Director - Place and Growth George Framallicco
LEAD MEMBER	Executive Member for Environment, Sport and Leisure - Ian Shenton

Outcome/Benefits to the community

To provide an update on Air Quality including;

Looking back

- Air Quality data update - Annual Status Report June 2023
- Defra Appraisal of ASR
- Air Quality Action Plan implementation and review

Looking forward

- Air Quality Management Area revocations
- Revised Air Quality Action plan (Air Quality Strategy consideration)
- Air Quality Monitoring and Assessment / Next ASR
- Governance and Scrutiny Arrangements going forward.

RECOMMENDATION

That Overview and Scrutiny Management Committee;

1. Note that air quality monitoring in 2022, indicated compliance with the nitrogen dioxide annual mean objective, at all monitoring locations within existing Air Quality Management Areas (AQMAs) and at all monitoring locations outside of the AQMAs.
2. Note that due to ongoing compliance with the nitrogen dioxide annual mean objective it is anticipated that 2 out of the 3 Air Quality Management Areas will be revoked in Spring 2024 – Twyford Town Centre and M4 motorway.
3. Note that one AQMA will be retained – Wokingham Town Centre.
4. Note that a formal update of the Air Quality Action Plan is required and will be progressed in 2024.
5. Schedule an Air Quality update in the O and S mgmt. forward plan for late summer/early Autumn 2024.

SUMMARY OF REPORT

Wokingham Borough Council is under a duty to monitor air quality and identify areas where the national air quality objectives are not being met. The air quality in 3 locations had been identified as not meeting an objective, resulting in the declaration of 3 Air Quality Management Areas (AQMAs). The pollutant of concern giving rise to the AQMAs is the annual mean nitrogen dioxide concentrations.

Annual status reports (ASRs) are required to be completed and submitted to the Department of the Environment Food and Rural Affairs (Defra). The latest status report (**June 2023**) provides information up to year end 2022.

In 2022 there were no exceedances of the annual mean nitrogen dioxide objective either within or outside of the AQMAs. Air quality has improved in Wokingham Borough Council, to such an extent that it is considered appropriate, having regard to technical guidance and Defra recommendations that 2 out the 3 AQMAS are revoked.

AQMA revocations are programmed to occur in Spring 2024, subject to decision of the Executive. At time of writing, a report regarding this is scheduled for consideration at Executive on **25th January 2024**

The next ASR (for 2023 data) is due for completion and submission to Defra by **July 2024**.

Local authorities with Air Quality Management Areas are required to have Air Quality Action Plans and to keep these under review. The current air quality action plan is dated March 2018 and is overdue for completion of formal review and update. This will continue to be progressed in 2024. A key date for a final revised AQAP to be achieved is **September 2024**.

As transport, in particular emissions from road transport, is a significant contributor to the levels of nitrogen dioxide, the AQAP review is being broadly aligned with the proposed Local Transport Plan 4 (LTP4) which is currently out for consultation - [Project • Our new Local Transport Plan: healthier, green ... \(wokingham.gov.uk\)](#)

It is recommended that, as a minimum, an overview of Air Quality is brought to Overview and Scrutiny Committee in late summer/early Autumn 2024, in order that latest information, can be considered shortly after the Annual Status Report is produced.

BACKGROUND

The Environment Act 1995 places a legal duty on all Local Authorities to regularly monitor the levels of Air Quality within their borough and identify areas where the Government's air quality objectives are likely to be exceeded.

Within Wokingham Borough Council area, Nitrogen Dioxide (NO₂) has been identified as a pollutant of concern. This is a pollutant that is produced by vehicles. The Government's objective for NO₂ is an annual average of no greater than 40µg/m³ (micrograms per cubic metre). If monitoring identifies high levels of NO₂, then the objectives are likely to be exceeded, and further action is required. Where exceedances are identified, the Local Authority is required to declare an Air Quality Management Area (AQMA) and produce an

Air Quality Action Plan (AQAP) setting out the measures that will be taken to improve Air Quality in the AQMA.

The Local Air Quality Management (LAQM) Framework has required Local Authorities to carry out regular reviews of Air Quality in their areas since 1998. These reviews used to be known as the Updated and Screening Assessment (USA) reports. The USA has now been replaced with the Annual Status Report (ASR), which provides an overview of air quality and fulfils the requirements of Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act (1995) and the relevant Policy and Technical Guidance documents.

Local air quality reviews have led to Wokingham Borough Council declaring three Air Quality Management Areas, known as:

M4 AQMA

Twyford Town Centre AQMA

Wokingham Town Centre AQMA

The M4 AQMA was declared for the NO₂ annual mean in 2001 and amended in 2004. It is a Zone 60m either side of the M4 from the Council's boundaries with Reading Borough Council (in the west) & Royal Borough Windsor & Maidenhead (in the East), it runs throughout the borough including an extended area along the A329 Reading Road where it underpasses the M4.

The Twyford Crossroads AQMA was declared for the exceedance of annual mean NO₂ in 2015. It includes the residential and commercial properties along parts of High Street in the west, Wargrave Road in the northwest, London Road in the north-east and Church Street the south-east.

The Wokingham Town Centre AQMA was declared for the exceedance of the annual mean NO₂ in 2015. It includes properties, along a small part of Reading Road and Station Road in the north-west, along Shute End and into Broad Street to the front of 44-52 Denmark Street, in the south-west, and along Peach Street into London Road ending at the junction with London Road and Seaford Road in the West.

Recent Air Quality Data

Full details of Air Quality Monitoring data and assessment is detailed in the Annual Status Report 2023. This report is produced by our Partner – the Public Protection Partnership, in consultation with internal teams. The Public Protection Partnership carry out Air Quality Monitoring, Review and Assessment on behalf of Wokingham Borough Council.

Summary information only is provided below.

Monitoring and assessment of air quality has continued intensively in the AQMAs, along with less intensive monitoring at selected locations around the borough outside of the AQMAs. Of the national objectives the pollutant of concern in Wokingham Borough is nitrogen dioxide. There are two objectives for nitrogen dioxide as detailed in table 1.

The objective of concern (and for which the AQMAs have been declared) is the **annual mean** objective. This is a chronic exposure objective, which relates to long term exposure. The 1 hour mean objective is an acute exposure criterion relating to short term exposure. The 1 hour mean objective has **not** been exceeded in Wokingham Borough Council.

Table 1: The National Nitrogen Dioxide Air Quality Objectives

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

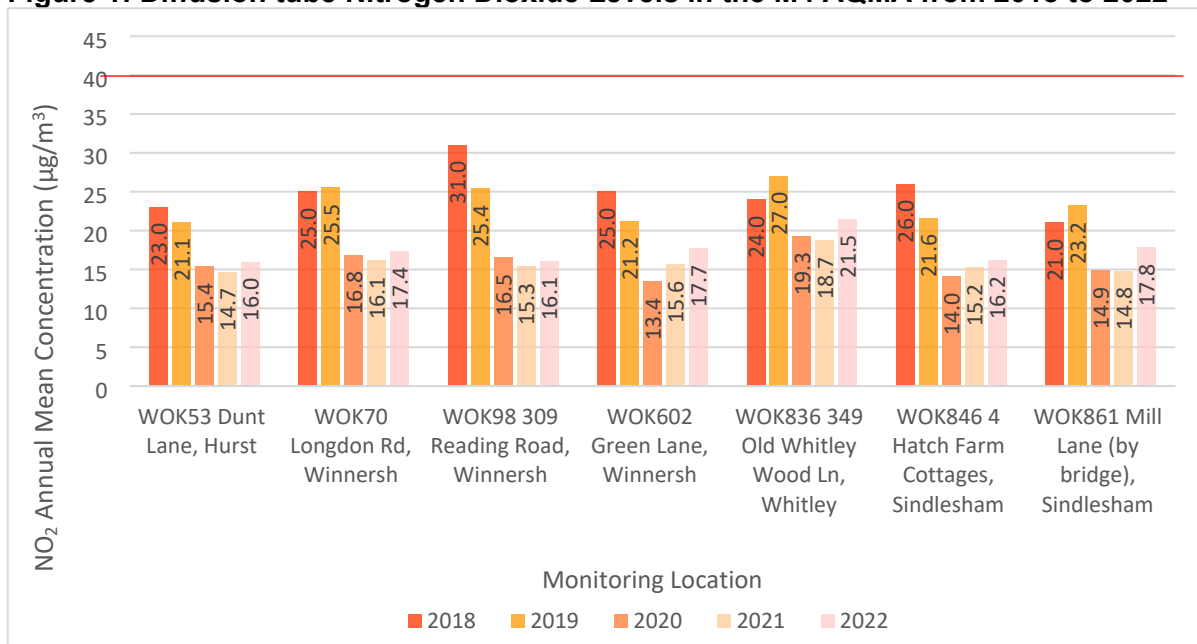
M4 AQMA

The NO₂ levels for the M4 AQMA, have been monitored using diffusion tubes since 2001 at 7 locations. These are all located within the AQMA.

- WOK53 – Dunt Lane, Hurst
- WOK70 - London Road, Winnersh
- WOK98 – 309 Reading Road, Winnersh
- WOK602 Green Lane, Winnersh
- WOK 836 – 349 Old Whitley Wood Ln4, Whitley
- WOK846 – 4 Hatch Farm Cottages, Sindlesham
- WOK861 - Mill Lane, Sindlesham

The results (see Figure 1 below) have been 36.0 µg/m³ or below for the past 5 years, with the highest level reaching 31.0 µg/m³ in 2018. Whilst the levels have started to rise slightly since 2020-2021 when the M4 had reduced traffic volumes due to the pandemic lockdowns, the levels have not risen to the levels measured pre-2020. A number of factors may attribute to this, including an increased use of electric vehicles, more people working from home and “hybrid working” and the implementation of the M4 smart motorway. Highways England commenced the smart motorway construction in 2018 and it was fully implemented in 2022. From 2018 – 2021 the section from Junction 8 to Junction 12, (which includes our AQMA), had reduced maximum traffic speeds of 50mph during construction. Maximum speed was increased to 60 mph during the testing period across 4 lanes during the final few months before completion. From December 2021 the motorway was reopened to traffic at the national speed limit.

Figure 1: Diffusion tube Nitrogen Dioxide Levels in the M4 AQMA from 2018 to 2022



Twyford AQMA

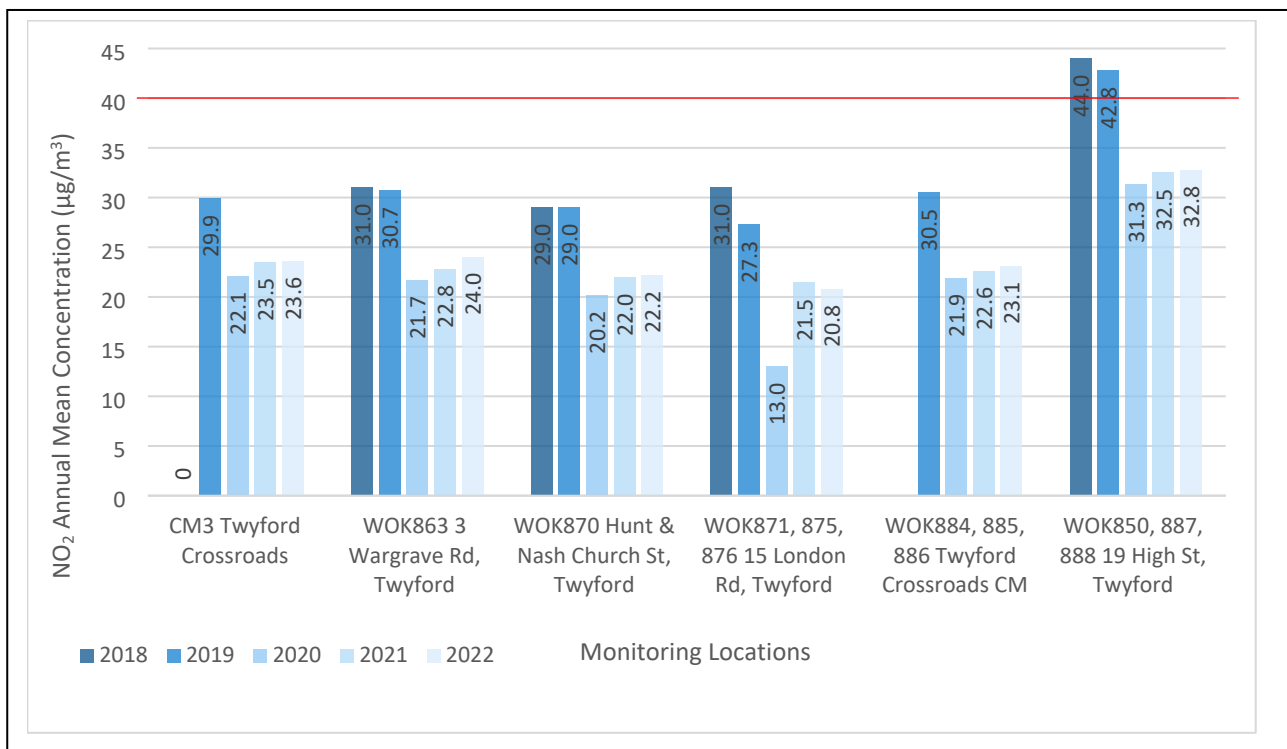
Nitrogen Dioxide levels have been monitored using diffusion tubes (5 sites 3 of which are triplicate) and at a continuous monitor. The sites are located at:

- WOK863 - 3 Wargrave Road, Twyford
- WOK870 - Hunt & Nash Church St, Twyford
- WOK871, 875, 876 - 15 London Road, Twyford
- WOK884, 885, 886 - Twyford Crossroads Continuous Monitor
- WOK850, 887 888 - 19 High Street, Twyford.

The results have been 36.0 $\mu\text{g}/\text{m}^3$ or below for the past 5 years, in 4 of the diffusion tube locations and the continuous monitor (shown in Figure 2 below). One of the diffusion tube locations, 19 High Street has been 36.0 $\mu\text{g}/\text{m}^3$ or below since 2020. Whilst the NO_2 has started to rise slightly since 2020 they remain below the 2019 levels.

A number of factors can attribute to these reduced levels including an increased use of electric vehicles, more people working from home and “hybrid working”, increase in public transport use, and reduction in vehicle idling.

Figure 2: Continuous Monitor (CM) and diffusion tube Annual NO_2 concentrations at Twyford Crossroads AQMA from 2018 to 2022



Wokingham Town Centre AQMA

Nitrogen Dioxide has been monitored using diffusion tubes at 8 sites (1 triplicate) and a continuous monitor at Peach Street. The sites are located at;

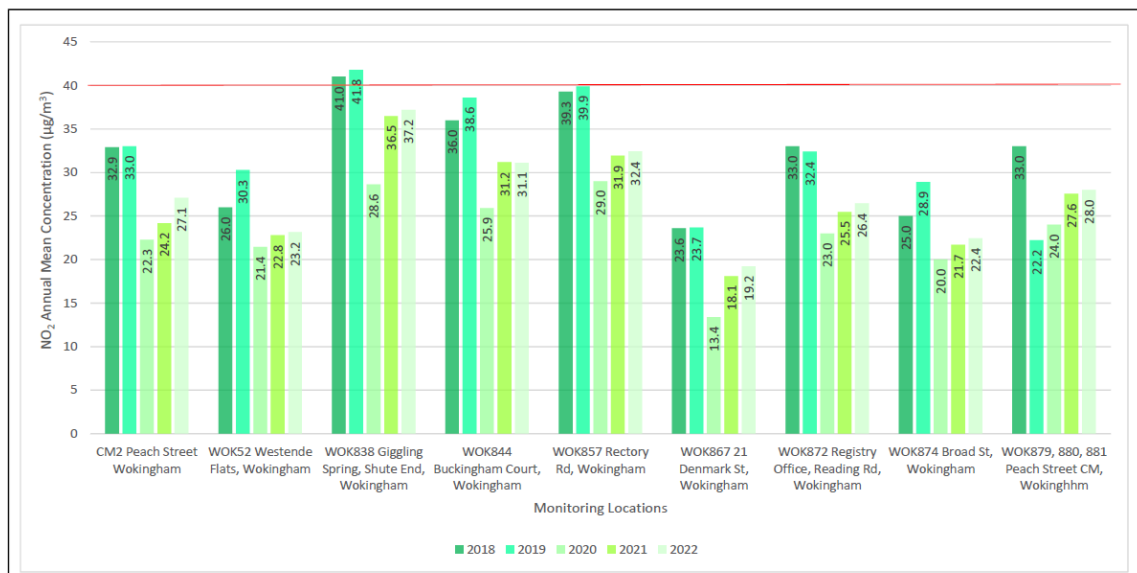
- CM3 – Peach Street and Wok 879, 880, 881

- Wok 52 – West End flats
- Wok 838 – Giggling Spring, Shute End
- Wok 834 – Buckingham Court
- Wok 857 – Rectory Road
- Wok 867 – 21 Denmark Street
- Wok 872 – (former) Registry Office, Reading Road
- Wok 874 – Broad Street

The results have been 36.0 $\mu\text{g}/\text{m}^3$ or below for the past 5 years, in 5 of the diffusion tube locations and the continuous monitor (shown in Figure 3 below). Two of the diffusion tube locations, Rectory Road and Buckingham Court have been 36.0 $\mu\text{g}/\text{m}^3$ or below since 2020. At one location Giggling Spring, Shute End, the results have been below 40 $\mu\text{g}/\text{m}^3$ for 3 years but have exceeded 36 $\mu\text{g}/\text{m}^3$ during 2 of these 3 years.

Whilst Nitrogen dioxide decreased substantially during covid there has been a gradual increase in the annual mean levels since that time, and whilst the majority of sites are still well below the level of concern, one location has exceeded this.

Figure 3: Continuous Monitor (CM) and diffusion tube Annual NO₂ concentrations at Wokingham Town Centre AQMA from 2018 to 2022



Defra Appraisal of ASR

ASRs submitted to Defra are assessed, and an Appraisal Report is provided by Defra annually. The Appraisal report for the ASR 2023 was received on 7th August 2023. On the same day Defra also issued FAQ142: Three or more years of compliance with air quality objectives? ([What's New | LAQM \(defra.gov.uk\)](https://www.defra.gov.uk/what-new/laqm)) providing additional guidance on which year's count towards full compliance needed for revocation.

The ASR stated that 2 further years of monitoring would be required, as it discounted potentially non-representative data for 2020 and 2021 (due to pandemic influence) and considered that 2022 data provided the first year towards consideration of ongoing compliance. Defra's appraisal was clear, that this precautionary approach was unnecessary, and that the pandemic influenced years could be considered, where they contributed to at least 3 years consecutive compliance and a downward trend.

Specific Defra comments were that;

“there is justification to revoke the [M4] and Twyford AQMA”;

“there is sufficient evidence to suggest that NO2 concentrations will not be exceeded in the [M4] and Twyford Crossroads AQMA”.

“There should not be any declared AQMAs for which compliance with the relevant objective has been achieved for a consecutive five year period”.

This comment would be applicable to the M4 AQMA only (referred to in the Appraisal Report as “Wokingham AQMA” not to be confused with Wokingham Town Centre AQMA)

“Keeping AQMAs in place longer than required risks diluting their meaning and impacting public trust in LAQM”

“The 2024 ASR should look to revoke the [M4] and Twyford Crossroads AQMA”.

Defra’s appraisal and the FAQ142 clarified the approach to be considered, having regard to pandemic influenced years.

Revocation of AQMAs

Statutory guidance states that where local authorities have three years of compliance, they should consider revocation. Where there is five years compliance there should not be any AQMA’s in place. Twyford has three clear years compliance data and the M4 has 5 clear years compliance data. Therefore, Defra’s annual status report appraisal has recommended that these orders are revoked.

At time of writing, a report “AQMA revocation” - is due to be considered by Executive on 25th January 2024 ([Public Pack\)Agenda Document for Executive, 25/01/2024 19:00 \(moderngov.co.uk\)](https://www.moderngov.co.uk/agenda/2024/01/25/19:00)

The recent data for Wokingham town centre AQMA, shows that the annual mean objective value is being met, but that having regard to recent trends indicating an increase in concentrations, and the margin of achievement of the objective, there is not currently sufficient confidence that the objective will continue to be met, and therefore at the current time it is not appropriate to revoke this AQMA.

Action Plan

An Air Quality Action Plan (AQAP) is required where local authorities have declared AQMAs. A combined AQAP for the AQMAs was developed, approved, and published in 2018. Measures in the plan, have been implemented since that time, with the Annual Status Reports providing updates on progress with implementation.

Current Action plan implementation progress

The latest ASR includes sections specifically related to reporting progress with the measures in the AQAP.

Table 1.2 of the ASR provides full details of all 44 actions in the current action plan. Key measures of progress as detailed in ASR 2023 are;

Key completed measures at the end of 2022 were:

- Construction on phase two of the Winnersh Relief Road to connect the B3030 King Street Lane to the A329 Reading Road, was completed in early 2022. This is part of the Council's multi-million-pound strategic new roads programme, which is being built to assist in improving network resilience to support the growth of the borough. The project has reduced the level of traffic passing through Winnersh Crossroads.
- Active Travel Fund Tranche 2 has been developed further with the selected scheme (Woodley to Reading Active Travel Route) consulted on in February 2022. Following consultation further design work is required to deliver a scheme more acceptable to the public.
- Active Travel Fund Tranche 3 has awarded £2.95m to the borough to enable us to complete the route from Woodley to Reading. As described above, we are currently redesigning the scheme but hope to complete implementation of some of the scheme in the next 12 months.
- Local Cycling and Walking Infrastructure Plan (LCWIP) for Wokingham Borough is underway with consultation on public views regarding walking and cycling in the borough completed. As part of the LCWIP outputs are cycling and walking network plans which identify preferred routes and core zones for further development and a prioritised schedule of infrastructure was in June 2022.
- In 2022 we complete personalised travel planning for new communities and delivered these enhanced PTP projects covering two development sites in 2022.
- Our Electric Vehicle (EV) charge points have continued to be expanded with the addition of 64 new publicly available charge points made available in 2022 bringing the total to 318. In addition, the Council's Executive approved on-street and in public car park charge point provision using the DfT's Office for Zero Emission Vehicles' On-street Residential Chargepoint Scheme. The bid document for this has been prepared though needs amendment following a change in the bidding criteria; once completed this should add approximately 60 charge points (locations to be confirmed) <https://app.vendelectric.com/>
- My Journey Promotion of active travel and travel choices website is on-going. There were 79,821 visitors to the website. We have continued to promote active travel through our social media feeds, and our followers increased to 1,978 (Facebook) and 1,048 (Twitter) in 2022/23 (financial year) with our top Facebook post reaching 10,878 people.
- MyJourney has continued to partner with Love to Ride and once again ran four cycling campaigns across the borough from 1st April 2022 to 31st March 2023. They achieved the following
 - o 30,892 rides logged
 - o 407,943 miles
 - o 12,546 transport trips
 - o 65,375 transport miles
 - o 268 new user accounts
- During the Cycle September Event, they also had an excellent turn out and saved 6,335 lbs of CO2.
 - o 42 workplaces participated
 - o 494 riders registered for the challenge
 - o 46,259 miles logged
 - o 3,754 trips logged
 - o 1,814 trips for transport
 - o 9,892 transport miles

- Bikeability figures for 2022 – 2023:
- Bikeability Level 1 courses (training off road): April 2022 – February 2023: 161 places delivered (0 booked for March)
- Bikeability Level 1/Level 2 courses (on road): April 2022 – Feb 2023: 1360 places +225 booked for March = 1585 places
- Bikeability Level 3 (advanced) courses: April 2022 – February 2023: 56 places delivered + 41 booked in March = 97 places
- Bikeability Learn to Ride (teaching younger children to ride): 236 places delivered in March = 266 children trained
- Also new - Bikeability Family training: 15 families trained (included 19 adults + 27 children.)
- Wokingham have also been awarded a larger Bikeability Grant by the Department for Transport for 2022 – 2023: a grant of £77,500 to train 1,800 children on Bikeability Courses + £5,832 for Learn to Ride training, making a total of £83,332.
- Bus services are continuing to suffer significantly from reduced patronage due to Covid-19. Reading Buses are continuing to operate services, though we have seen some reduced in frequency or cancelled completely due to lack of use. We continue to work with the bus operators to try to maintain a good level of service.
- WBC has just completed the Coppid Beech Park and Ride facility and continue to expand the Winnersh Triangle Park and Ride site. In addition, the Thames Valley Park and Ride site is also available for use. Despite this, there are currently only buses serving the Thames Valley Park and Ride due to this low usage and low expected uptake in the near future.

Draft Update Air Quality Action Plan

As Wokingham will have a retained AQMA (Wokingham Town Centre), it is necessary to have an up-to-date Action Plan.

A working group met quarterly in 2022. In 2023 the frequency increased to monthly to enable increased engagement to progress Air Quality related workstreams, including review and update of the Air Quality Action Plan. Concurrently the LTP4 team have been progressing the LTP update. Given that the pollutant of concern, nitrogen dioxide relates to the contribution to air pollution from traffic emissions it is considered appropriate, where possible to align the AQAP with the LTP4 progression, which is currently out to consultation.

The Working group currently comprises officers from the following teams;

- Transport Planning
- (Transport) Network Management
- Climate Emergency
- My Journey
- Public Health
- Enforcement and Safety
- Public Protection Partnership

Collectively the team are currently updating their respective measures and considering additional measures for inclusion in the plan.

The current plan is a combined AQAP for Wokingham and Twyford AQMAs. In order to develop the plan, it is necessary, should the revocations detailed above receive approval, for direct measures associated with this AQMA to be removed from the plan (although measures may be retained as generic measures to maintain compliance with objectives).

It is anticipated that a draft will be ready for consultation in late Spring 2024; anticipated that subject to governance arrangements statutory and public consultation will be able to proceed in early Summer 2024, with a final plan anticipated to be ready for approval early Autumn 2024.

An extension request, having regard to the above, has been submitted to Defra – pending their agreement.

There are implications should the revised AQAP be delayed - Wokingham and their partners have been successful in securing grant funding to support air quality initiatives. The most recent grant fund projects are due to complete. The Air Quality Grant funding scheme usually opens in September each year and it has conventionally be a pre-requisite that local authorities submitting bids have a valid current Air Quality Action Plan. Therefore, delays to finalising a plan, may restrict the opportunity to apply for funding under the grant scheme.

The existing Air Quality Action Plan met the requirements for Air Quality Action Plans under the Environment Act 1995 as at 2018. The requirement at that time for local authorities with Air Quality Management Areas was that there must be an action plan *“in pursuit of the achievement of the air quality standards and objectives in the [air quality management areas]”*.

The Environment Act 2021 amended the Environment Act 1995, in respect of the Local Air Quality Framework and in respect of Air Quality Action Plans strengthened the requirements, such that AQAPs must now be prepared *“for the purpose of securing that air quality objectives are achieved..... and maintained after they have been achieved”*.

The revised AQAP will have regard to the new requirements of the Environment Act 1995.

Under the LAQM framework, an Air Quality Strategy, is only required where a local authority does not have an Air Quality Management Area. Therefore, with the retention of an Air Quality Management Area, Wokingham BC is not required to have a statutory Air Quality Strategy.

Current and future air quality monitoring and assessment

In 2023 monitoring and assessment continued as for 2022 with 2 continuous monitors, and 47 Diffusion tube sites. The results and assessment and update on progress with implementing the Air quality action plan, and update of Defra grant funded projects will be reported in the 2024 Annual Status Report, which is due for completion by the end of June 2024.

The nature and type of monitoring taking place in 2024 has been reviewed, having regard to the level of compliance in current AQMAs. WBC will still be required under the LAQM regime to provide annual status reports, and these can only be informed by a degree of monitoring taking place. Monitoring using diffusion tubes is therefore continuing within the

AQMAs that are proposed to be revoked and at selected locations across the borough. The intensity of monitoring has been reduced, in so far as 1 continuous monitor has been decommissioned in Twyford. Within the Wokingham Town Centre AQMA the continuous monitor is being retained along with diffusion tube monitoring.

This has resulted in a modest but proportionate saving in costs associated with operation and data analysis of 1 continuous monitor.

Governance – Overview and scrutiny

In terms of governance, the last significant activity in terms of air quality work stream warranting approval was the approval of the Air Quality Action Plan in 2018. Environmental Health and Licensing services were re-established in-house in 2022. There are potentially key decisions, and/or activities of interest for which governance arrangements need to be confirmed – in particular overview and scrutiny and timeliness of overview reports on Air Quality.

During 2024 decisions or activity of interest include;

Spring 2024	Revocations of AQMAs,
Late Spring 2024	Draft revised Air Quality Action Plan, (with subsequent statutory consultation).
End June 2024	Annual Status Report (for 2023 data),
Mid Aug 2024(estimate)	Defra ASR appraisal
Autumn 2024	Air Quality Action Plan approval.

As a minimum it is recommended that an Air Quality update, be scheduled in the Overview & Scrutiny Management Committee forward plan for late summer/early Autumn 2024

UPDATE – 26th January 2024

On 25th January 2024, Executive considered the AQMA report and agreed the recommendations, which included approval of the commencement of revocation of the Twyford Crossroads and M4 Air Quality Management Areas.

FINANCIAL IMPLICATIONS OF THE RECOMMENDATION

The Council faces unprecedented financial pressures as a result of; the longer-term impact of the COVID-19 crisis, Brexit, the war in Ukraine and the general economic climate of rising prices and the increasing cost of debt. It is therefore imperative that Council resources are optimised and are focused on the vulnerable and on its highest priorities.

	How much will it Cost/ (Save)	Is there sufficient funding – if not quantify the Shortfall	Revenue or Capital?
Current Financial Year (Year 1)	Minimal officer time to provide an overview report		
Next Financial Year (Year 2)			

Following Financial Year (Year 3)			
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Other Financial Information relevant to the Recommendation/Decision
Report for overview only.

Cross-Council Implications
None direct - as for overview only.

Public Sector Equality Duty
None identified

Climate Emergency
Complementary work stream.

Reasons for considering the report in Closed Session
None – Air quality information and update should be publicly available

List of Background Papers
Annual Status Report - June 2023 Defra – Annual Status Report Appraisal Report dated July 2023 (received 7 th August 2023)

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