

Report to Environment and Licensing Committee

Subject: Revocation of Gedling No: 2 Air Quality Management Order 2011 (Nitrogen Dioxide)

Date: 5th November 2024

Author: Director of Place

Wards Affected

Daybrook, Ernehale, Redhill and Woodthorpe

Purpose

To seek approval to:

1. Make an Order under the Environment Act 1995 to revoke Gedling No: 2 Air Quality Management Order 2011 (Nitrogen Dioxide) along the A60 Mansfield Road due to yearly Nitrogen Dioxide (NO₂) results being lower than the Air Quality Objective since 2019.

Key Decision

This is not a key decision

Recommendation(s)

THAT Members:

1. **Make an Order under the Environment Act 1995 to revoke the Gedling No: 2 Air Quality Management Order 2011 (Nitrogen Dioxide), a draft of which is attached at Appendix II of this report.**

1 Background

- 1.1 Local Air Quality Management (LAQM) is set out in Part IV of the Environment Act (1995) which places an obligation on all local authorities to regularly review and assess air quality in their area to determine whether or not the air quality objectives are likely to be achieved. Where an exceedance is considered likely the local authority must declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives.

- 1.2 An Annual Status Report (ASR) is sent to Defra for approval. The report details the results from the previous year's monitoring, and any measures that have been implemented to improve air quality.
- 1.3 Gedling Borough currently has one Air Quality Management Area. The A60 Mansfield Road which was declared in 2011 for exceedances of the annual average Nitrogen Dioxide (NO₂) air quality objective (which is 40 µg/m³). The extent of the Gedling No: 2 Air Quality Management Order 2011 management area is shown highlighted in red on the plan at **Appendix II**.
- 1.4 Gedling Borough has been working closely with both Nottinghamshire County and Nottingham City Councils Highways departments to deliver actions found in the Air Quality Action Plan, to improve air quality along the A60 Mansfield Road.
- 1.5 Some of the measures to help reduce the pollution levels have included:
 - Marketing and promotion of sustainable transport alternatives
 - Assisting in the development of the Go-Ultra Low programme
 - County working with bus providers to retrofitting exhaust technology
 - County Highways effective network management
 - Workplace Travel Plans
 - County Highways project of personal travel planning with residents in the AQMA.
 - School Travel Toolkits
 - ECOSTars Fleet Recognition Scheme, which ran from 2012 until 2020. At close the scheme membership stood at 139 members operating over 8000 commercial vehicles around the Borough.
 - Installation of 16 EV points covering 32 bays under OZEV On-Street Residential Charging Scheme.
 - Assisting in the development of the Nottinghamshire Air Quality Strategy

2 Reasons for Proposed Revocation

- 2.1 DEFRA Air Quality Technical Guidance (LAQM.TG22) makes a number of points when guiding Councils on the issues relating to revoking an AQMA:
 - There should not be any declared AQMAs for which compliance with the relevant objective has been achieved for a consecutive **five-year** period.
 - The revocation of an AQMA should be considered following **three consecutive years** of compliance with the relevant objective as evidenced through monitoring.

- Where NO₂ monitoring is completed using diffusion tubes, to account for the inherent uncertainty associated with the monitoring method, it is recommended that revocation of an AQMA should be considered following three consecutive years of annual mean NO₂ concentrations being lower than 36µg/m³ (i.e. within 10% of the annual mean NO₂ objective).
- Finally, before revoking an AQMA on the basis of measured pollutant concentrations, the authority needs to be reasonably certain that any future exceedances (that might occur in more adverse meteorological conditions) are unlikely.

2.3 **Appendix I** contains an extract from the Annual Status Report 2024 – ‘*Information to Support the Revocation of the AQMA*’ which gives an in depth look at the results and argument for the revocation.

To conclude:

1. Data from the reference NO_x analyser within the A60 has been consistently well below the objective **for 6 years** (not including 2020).
2. Diffusion tube data within the AQMA in the **last 3 reporting years** has been below the 36µg/m³ level.
3. Trends in levels measured by the reference analyser and diffusion tubes are declining.
4. Early raw data collection for 2024 does not indicate any significant changes in levels within the AQMA.

3 Consultation with DEFRA and other stakeholders

3.1 The Environment Act (1995) provides the statutory basis for consultation and liaison in respect of LAQM. DEFRA is the key statutory consultee under LAQM, Schedule 11 of the 1995 Act also requires local authorities to consult the following:

- Environment Agency;
- National Highways;
- The Mayor of London (for London Boroughs only);
- All local authorities neighbouring the local authority in question;
- The County Council;
- Any National Park authority as appropriate;
- Other public authorities as appropriate; and
- Bodies representing local business interests and other organisations as appropriate.

3.2 DEFRA (through the LAQM helpdesk) have confirmed that:

‘that the compliance reported in the ASR supports your decision to revoke the AQMA. The statement of revocation decision in ASR is considered as consultation of revocation decision with Defra. As the 2024 Gedling ASR is approved, you can go ahead to proceed with the revocation.’

- 3.3 Consultation exercise was carried out via email with the following, over a period of 4 weeks from 27th August 2024:

Nottinghamshire County Local Transport Plans & Programme Development Team
Nottinghamshire County Council Public Health Team
Environment Agency
Nottingham City Council Transport Team
Other LA Environmental Health Teams within Nottinghamshire
Ward Members for Daybrook, Ernehale, Redhill and Woodthorpe

No objections have been received from the statutory consultees.

4 Proposal

- 4.1 That Members approve the revocation of Gedling No: 2 Air Quality Management Order 2011 (Nitrogen Dioxide)
- 4.2 As part of the conclusions and consultation with DEFRA it was agreed that we will continue to measure both using the NO_x analyser and diffusion tubes along the A60 to ensure continued compliance.

5 Alternative Options

- 5.1 Having an AQMA does bring with it some advantages: it does bring air quality considerations to the attention during development, and highways planning, it can secure grant funding for projects within the AQMA and generally it highlights the issues around air pollution with residents.
- 5.2 However, DEFRA have stated that “*Keeping AQMAs in place longer than required would risk diluting their meaning and impacting public trust in LAQM.*”
- 5.3 Members could decide to leave the AQMA in place. This would however be against guidance and DEFRA's advice.

6 Financial Implications

- 6.1 None

7 Legal Implications

- 7.1 Section 83(2)(b) of the Environment Act 1995 empowers the local authority to, by order, revoke a previous order if it appears that on subsequent air quality review that the air quality standards and objectives are being achieved, and are likely throughout the relevant period to be achieved, within the designated area.
- 7.2 Under section 90 of the Environment Act 1995 it is a statutory requirement for the local authority to consult before revoking a previously made order, as discussed in section 3 of this report. Members should have consideration to the consultation responses in coming to its decision.

8 Equalities Implications

8.1 None

9 Carbon Reduction/Environmental Sustainability Implications

9.1 The reduction in nitrogen dioxide tail pipe emissions along the A60 is likely to also have a positive impact from a carbon reduction perspective.

10 Appendices

10.1 Appendix I - extract from the Annual Status Report 2024 – ‘Information to Support the Revocation of the AQMA’

10.2 Appendix II – Draft Revocation Order

11 Background Papers

11.0 None

12 Reasons for Recommendations

12.1 Air quality data indicates that the criteria set by DEFRA for the revocation of the AQMA has been met.

12.2 Statutory consultees, including DEFRA, have concurred with the recommendation to revoke the AQMA.

Statutory Officer approval

Approved by:

Date:

On behalf of the Chief Financial Officer

Approved by:

Date:

On behalf of the Monitoring Officer

Appendix I

Extract from the Annual Status Report 2024 – ‘Information to Support the Revocation of the AQMA’

Information to Support the Revocation of the AQMA

The Air Quality Management Area (AQMA) is not a large geographic area and is confined to an area directly fronting the A60. As such it was not considered necessary to carry out modelling study and the proposal to revoke the AQMA is taken using both results from the NO_x analyser (which is within the AQMA) and diffusion tube monitoring data.

LAQM Technical Guidance 2022 (LAQM.TG22) makes a number of points when guiding LAs on the issues relating to revoking an AQMA:

- There should not be any declared AQMAs for which compliance with the relevant objective has been achieved for a consecutive **five-year** period.
- The revocation of an AQMA should be considered following **three consecutive years** of compliance with the relevant objective as evidenced through monitoring.
- Where NO₂ monitoring is completed using diffusion tubes, to account for the inherent uncertainty associated with the monitoring method, it is recommended that revocation of an AQMA should be considered following three consecutive years of annual mean NO₂ concentrations being lower than 36µg/m³ (i.e. within 10% of the annual mean NO₂ objective).

Keeping AQMAs in place longer than required would risk diluting their meaning and impacting public trust in LAQM.

On the issue of using data impacted by the COVID-19 lockdowns:

“It is not advisable for the revocation of an AQMA to be based solely upon compliance in a year not representative of long-term trends. For example, compliance being reached in 2020 may not be representative of long-term trends in pollutant concentrations due to the change in activity observed across the UK as a result of COVID-19 and associated lock down measures.

Where 2020 is one of many consecutive years of compliance, this may be considered for revocation.”

Finally, before revoking an AQMA on the basis of measured pollutant concentrations, the authority needs to be reasonably certain that any future exceedances (that might occur in more adverse meteorological conditions) are unlikely.

Figure E.1 – NO2 Chemiluminescence Analyser data long term trends 2002 - 2023

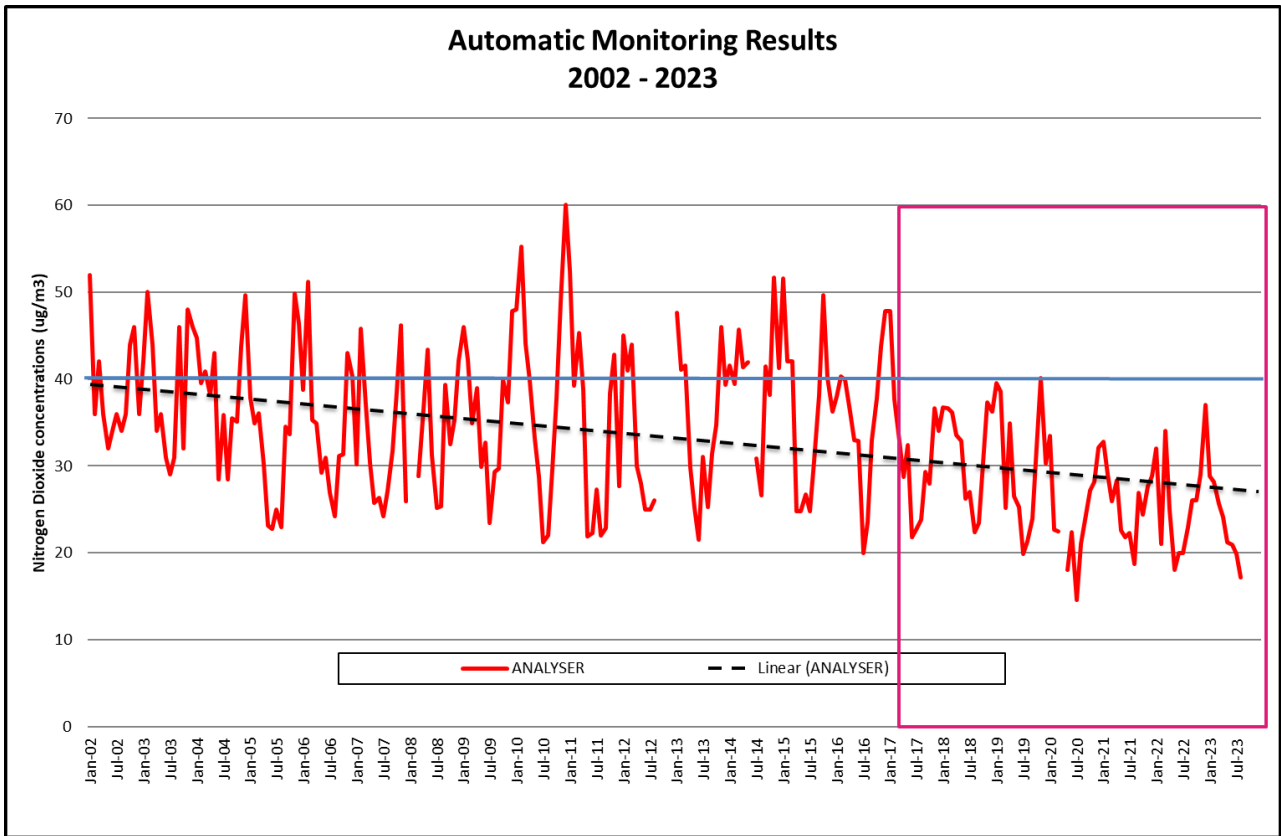
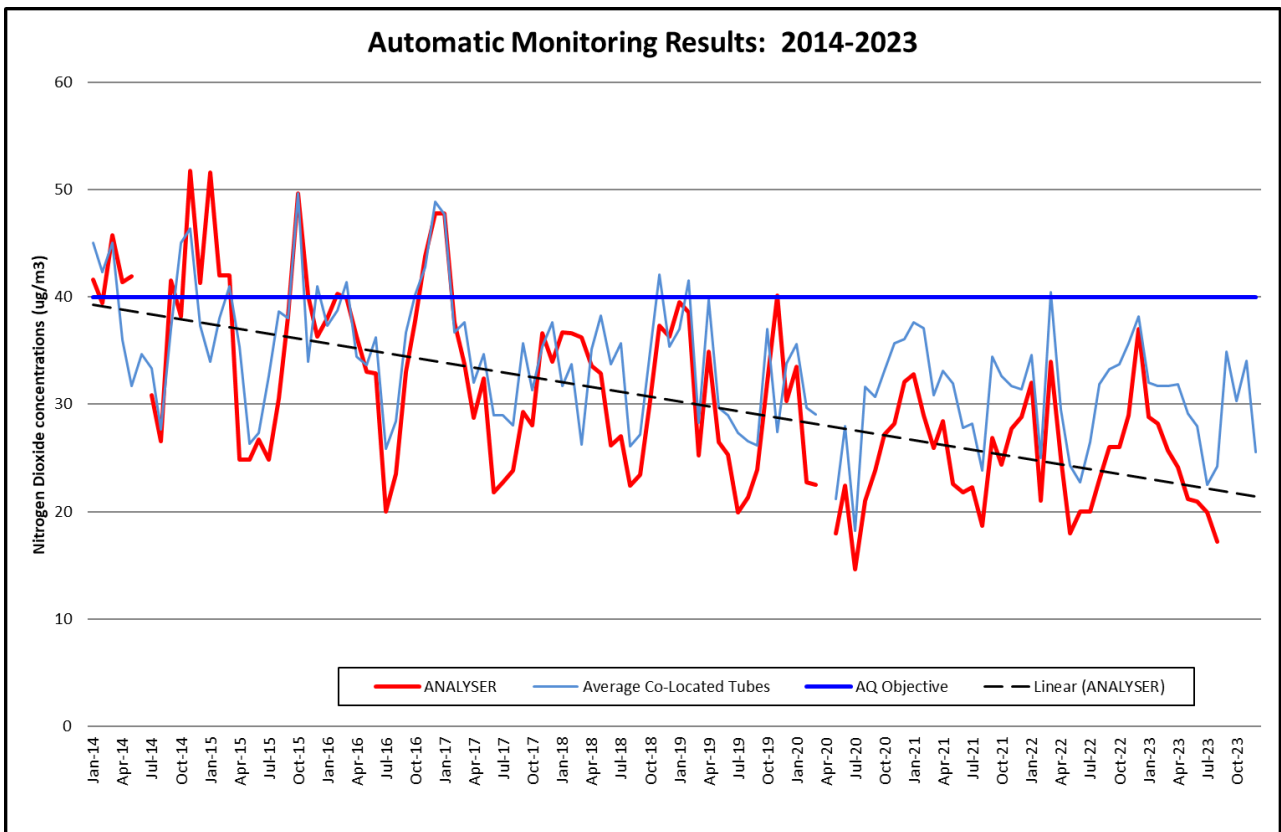


Figure E.2 – NO2 Chemiluminescence Analyser/raw co-located diffusion tube data 10 year (2014 – 2023)



Reference Analyser Data

Table E1 shows the annual averages over the past 7 years (inc.2020). Whilst the analyser is within the AQMA it is not particularly close (due to siting restrictions) to critical receptors. However, levels have been consistently low and falling as can be seen in graphs Figures E.1 and E.2. Figure E.1 also indicates that (purple box) since 2017 the levels recorded have not exceeded the objective.

Diffusion Tube Data within the AQMA

There are 13 NO₂ diffusion tubes around the AQMA (11 inside the AQMA) Table E.1 presents the annual averages (adjusted for bias and annualised as required). Figures E.3 and E.4 present tube data in a graphic form.

Table E.1 – NO₂ Diffusion tube data AQMA (concentrations presented in µg/m³)

| Diffusion Tube ID | Location | Site Type | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|---------------------|------------------------------------|----------------|------|------|------|------|------|------|------|
| 82492 | Grove PH Daybrook Sq | Roadside | 34.0 | 29.0 | 30.0 | 24.1 | 26.5 | 26.6 | 24.5 |
| 87398 | Morley Mills Building | Roadside | 31.0 | 30.0 | 31.0 | 22.9 | 24.4 | 24.9 | 22.4 |
| 87399 | Mansfield Road, Redhill | Roadside | 23.0 | 23.0 | 24.0 | 17.9 | 19.6 | 19.0 | 16.8 |
| 87400 | Daybrook Dental Surgery | Roadside | 31.0 | 30.0 | 28.0 | 22.9 | 25.8 | 23.9 | 22.4 |
| 87403, 87404, 87405 | Daybrook Analyser co-located tubes | Roadside | 31.0 | 31.0 | 31.0 | 23.6 | 26.6 | 26.0 | 24.0 |
| 87407 | The Vale PH Thackerays Lane | Roadside | 35.0 | 33.0 | 28.0 | 25.1 | 27.4 | 27.4 | 24.6 |
| 88005** | Mansfield Road, Redhill North | Roadside | - | - | 33.0 | 28.9 | 32.4 | 30.4 | 27.6 |
| 87410** | Civic Centre, Arnold | Urban Backgrnd | 18.0 | 16.0 | 16.0 | 12.0 | 13.4 | 13.0 | 11.7 |
| 87412 | Daybrook Fish Bar | Roadside | 43.0 | 39.0 | 39.0 | 28.5 | 32.4 | 33.3 | 29.0 |
| 87413 | T&S Heating | Roadside | 41.0 | 37.0 | 36.0 | 27.0 | 31.4 | 30.7 | 29.4 |
| 87414 | Frank Keys | Roadside | 26.0 | 23.0 | 30.0 | 24.3 | 26.7 | 25.7 | 23.5 |
| GBC1 | Daybrook NO _x Analyser | Roadside | 31.4 | 31.6 | 29.8 | 24.2 | 25.8 | 26.1 | 24.9 |

Data presented is bias adjusted and annualised where applicable.

** Tubes **not** inside the AQMA

Table E.1 shows data for the last 7 years which is the last year where the objective was exceeded in the AQMA. It can be seen that generally diffusion tube data is below the 36µg/m³ level.

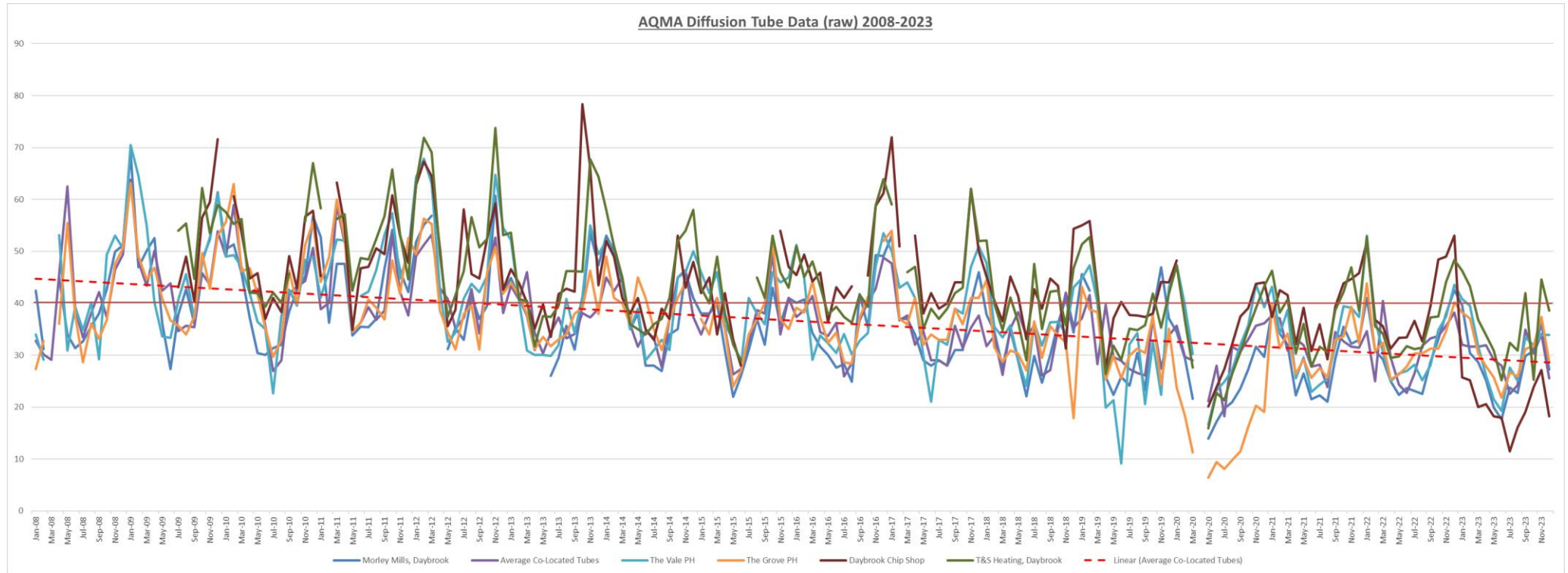
The two tubes of non-compliance in 2017 have not exceeded the 36µg/m³ level in the last three years of reporting: four years if including 2020.

Figure E.3 – NO2 Diffusion Tube data AQMA - (2019 – 2023)



Figure E.4 shows long term trends in the diffusion tube measurements within the AQMA. The trendline (red dotted) is that of the average of the co-located tubes, this shows the long-term declining trend in NO₂ levels over the last 16 years.

Figure E.4 – NO2 Diffusion Tube Data (raw data) 2008 - 2023



Conclusions

1. Data from the reference NO_x analyser within the A60 has been consistently below the objective.
2. Diffusion tube data within the AQMA in the last 3 reporting years has been below the 36µg/m³ level.
3. Trends in levels measured by the reference analyser and diffusion tubes are declining.
4. Early raw data collection for 2024 does not indicate any significant changes in levels within the AQMA.

Gedling Borough Council therefore propose to revoke the Air Quality Management Area along the A60 Mansfield Road.

We will continue to measure both using the NO_x analyser and diffusion tubes along the A60 to ensure continued compliance.

Appendix II
Draft Revocation Order

Environment Act 1995
Part IV Section 83(2)(b)

GEDLING BOROUGH COUNCIL
ORDER REVOKING AN AIR QUALITY MANAGEMENT ORDER

The Gedling Borough Council (the Council), in exercise of the powers conferred upon it by Section 83(2)(b) of the Environment Act 1995, hereby makes the following Order:-

1. This Order shall revoke the area known as Gedling No: 2 Air Quality Management Area (AQMA) designated by Order on 16th March 2011 (Nitrogen Dioxide) for Nitrogen Dioxide (Annual Mean) objective as specified in the Air Quality Regulations (England) (Wales) 2000. The AQMA to be revoked is found below edged in red.
2. This Order shall come into force on ****/11/2024.**

THE COMMON SEAL of
GEDLING BOROUGH
COUNCIL

was hereunto affixed on this day
****** November 2024
in the presence of:

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